The University of Southampton

Faculty of Medicine

Medical Education

Bursting bubbles: Exploring discourses, perceptions and experiences of widening participation in two UK medical schools

by

Heather Mozley

Thesis for the degree of

Doctor of Philosophy in Medical Education

July 2023

University of Southampton

Abstract

Faculty of Medicine

Medical Education
Doctor of Philosophy in Medical Education
By Heather Mozley

Many UK medical schools support students from underrepresented groups to access and gain medical degrees through widening participation strategies like Gateway programmes, which provide an additional year of study to support transition to university. Additional support through widening participation can lead to underrepresented students being viewed as lacking, leading to a student deficit discourse. Little is known about how increasing student diversity through gateway programmes impacts the experiences of *all* medical students.

Through a qualitative, comparative case study, I explored the discourses, perceptions and experiences of increasing student diversity through widening participation at the University of Southampton (UoS) and University of Aberdeen (UoA) medical schools. A Critical Discourse Analysis of the relevant institutional webpages revealed different understandings about the purpose of gateway programmes. Although the UoS webpages challenged the deficit discourse by highlighting gateway students' academic success and progression, neither institution promoted any benefits of increasing diversity.

Medical students in Years 1-3 and staff at each institution participated in focus group discussions about their perceptions of widening participation, student diversity and integration in medical school; data were thematically analysed. Experiences of interacting with students from different backgrounds were explored in greater depth through narrative interviews with students in their clinical years (3-5) of medical school.

At the UoS, gateway students were perceived as different to their peers and discrimination inhibited their integration. Nonetheless, their expressions of differences were valued and encouraged. UoA gateway students were integrated as equals within the main cohort, but the value of their 'unique' contributions was sometimes questioned. Some participants felt professional assimilation (being "*moulded*") in the clinical years mitigated the potential for gateway students to have a positive impact on others' learning.

Interactions between students from different backgrounds triggered various epiphanies and realisations for my participants, which transformed their learning experiences by:

- **Bursting Bubbles:** raising awareness of taken-for granted assumptions and ways of thinking, legitimising differences through experience, and transforming worldviews
- **Enriching all student learning:** through cultural knowledge exchange and diversifying curricula
- **Enhancing soft skills:** communication, teamwork, problem-solving with 'Others'
- **Facilitating recognition of own strengths:** "*people have little things you could kind of add to them*"

These benefits must be widely promoted to eradicate harmful discourses of deficit and promote a culture that celebrates the diversity of insights, experiences and skills that are necessary to provide healthcare in our multicultural society. Medical educators should reflect on the aims of widening participation to ensure institutional goals and the potential rewards of increasing medical school diversity are achieved. Diversity and reflexivity training are necessary to create culturally safe spaces in which educators and students alike can benefit from identifying their own unique contributions, and what they can learn from others.

Table of Contents

Table of Contents 7
List of figures in this thesis 13
List of tables in this thesis 15
List of accompanying material 17
Declaration of Authorship 19
Thesis Supervisors 21
Definitions of key terms: 25
Acronyms used throughout the report 27
Chapter 1 An introduction to this thesis 29
1.1 Thesis overview 30
1.1.1 Background (Literature Review and Methodology) 31
1.1.2 Case Study Context and Discourses of Widening Participation 31
1.1.3 Perceptions of diversity and Widening Participation 31
1.1.4 Experiences of diversity and Widening Participation 32
1.1.5 Discussion and Conclusion 32
Chapter 2 An Introduction to Widening Participation 35
2.1 Defining Widening Access and Participation 35
2.2 Who is underrepresented in UK universities? 35
2.3 Why are there inequalities in access, success and progression in UK universities? 37
2.4 Widening Participation in UK Medicine 39
Chapter 3 How are underrepresented students perceived and constructed in HE and in Medicine? 45
3.1 The deficit discourse: constructions of underrepresented students as “lacking” 45
3.2 Integration and Othering of SURGs 48
3.3 Perceptions of SURGs as valuable 50
3.3.1 The value of WP in medicine 52
3.4 Summary 56
Chapter 4 General Methodology 59
4.1 The Qualitative Approach 59
4.2 Guiding Philosophical Principles 59
4.2.1 Ontology 60
4.2.2 Epistemology 60

4.2.3 Qualitative research paradigms 61
4.3 Ensuring quality in qualitative research 63
4.3.1 Reflexivity 63
4.3.2 Credibility, dependability, confirmability and transferability 64
4.4 Study design: Case Study 65
4.4.1 Case study design 65
4.4.2 Development of the case study 67
4.4.3 The cases (subjects) 68
4.4.4 The purpose: phenomena/object of the study 69
4.4.5 Data collection and analyses 70
4.5 Ethical considerations 70
4.5.1 Informed consent 70
4.5.2 Anonymity and confidentiality 71
4.5.3 Interpretation 71
4.6 Summary 72
Chapter 5 An exploration of the two cases: the UoS and UoA medical schools 73
5.1 Sources of information 73
5.2 General context 74
5.3 The University of Southampton 75
5.3.1 National and local context 75
5.3.2 BM6: The UoS gateway to medicine programme 76
5.3.3 Demographic data for the UoS medical school 77
5.4 The University of Aberdeen 80
5.4.1 National and local context 80
5.4.2 G2M: The UoA Gateway to Medicine programme 80
5.4.3 Demographic data 81
5.5 Key differences between the UoS and UoA medical school gateway programmes 84
5.5.1 Key differences between the gateway programmes: 85
5.5.2 Demographic data discussion 87
5.6 Limitations 89
5.7 Conclusion 90
Chapter 6 A Critical Discourse Analysis of gateway programme webpages 91
6.1 Background 91
6.2 Methods 95
6.2.1 Text selection 95

6.2.2 Data analysis 95
6.3 Findings and discussion 98
6.3.1 University of Southampton Findings: 98
Discussion about the University of Southampton webpages: 103
6.3.2 University of Aberdeen Findings 105
6.3.3 Discussion about the University of Aberdeen webpages 110
6.3.4 Similarities between the pages 111
6.3.5 Limitations 112
6.4 Conclusion 114
6.4.1 Summary of key differences between the two cases: 114
Chapter 7 Valuing difference: Perceptions of WP and diversity in the UoS and UoA medical schools 115
7.1 Background 115
7.1.1 Research questions 116
7.2 Methods 117
7.2.1 Data type and collection: focus groups 118
7.2.2 Participants and recruitment 119
7.2.3 Analytical approach: Thematic Analysis 121
7.3 Findings 123
7.3.1 Participants 123
7.3.2 University of Southampton 127
7.3.3 University of Aberdeen 131
7.4 Discussion: 135
7.4.1 Integration vs assimilation 135
7.4.2 Social attachments and communities 136
7.4.3 The impact of capital 137
7.4.4 Belonging and identity 138
7.4.5 Benefits of diversity: 140
7.4.6 Limitations of this study 141
7.4.7 Impact of this study 142
7.5 Conclusion 142
7.5.1 Summary of key differences between the two cases: 143
Chapter 8 Legitimising Difference: A narrative exploration of how interactions with students from different backgrounds affect experiences of medical school 145
8.1 Background 145
8.2 Methods 146

8.2.1 Data type and collection: narrative interviews 146
8.2.2 Participants and recruitment 147
8.2.3 Interview procedure 148
8.2.4 Data analysis 149
8.3 Interpretive stories 152
8.3.1 Participants and narrative summaries 153
8.3.2 Interpretive stories 155
8.3.3 Stories which illustrate “Observing Others’ Worlds” 158
8.3.4 Sade’s story (UoS, BM5 Y3): “It ends up not being as big as a deal as you might think it would be in the beginning” 159
8.3.5 Maduka’s story (UoA, G2M Y3): “I think (2) It has made me realize I have more options” 170
8.3.6 Stories which illustrate Unexpected Friendships 178
8.3.7 Rishi’s story (UoS, BM5 Y4): “I kind of got the sense that I **had** the university experience” 179
8.3.8 Priya’s story (UoA, G2M Y3): “it is nice to know that people have little things that you could kind of add to them” 187
8.3.9 Stories which illustrate A Moment with an ‘Other’ 198
8.3.10 Mairi’s story (UoA, non-G2M Y3): “I think it would be useful, um- more useful (1) If each (1) kind of (.) medical schools set kind of certain standards” ... 199
8.3.11 Aaliyah’s story (UoS, BM6 Y5): “There was kind of these snide remarks” 205
8.3.12 Niall’s story (UoA, non-G2M Y4): “you started to look at each other as friends, as whole people, and then you look at patients (.) look at them as a whole clinical picture” 217
8.3.13 Tariq’s story (UoS, BM6 Y4): “You hear from other students about (1) what that’s like from the other side” 226
8.4 Discussion of the narratives 236
8.4.1 How increasing diversity through WP transforms worldviews 236
8.4.2 Pre-university experiences and expectations: perceptions of ‘Medics’ .. 238
8.4.3 Awareness of difference, legitimising difference and bursting bubbles .. 239
8.4.4 Practical recommendations from this study 241
8.4.5 Limitations and recommendations for further research 245
8.5 Conclusion 247
Chapter 9 Overall discussion 249
9.1 Rationale and methodology 249
9.2 Summary of overall findings 250
9.3 Key contribution of this thesis: 252

9.3.1 Brings to the surface a backgrounded discourse of WP as beneficial ... 253
9.4 Critical reflections on the research design ... 255
9.4.1 Case study institutions ... 255
9.4.2 So… which type of gateway programme is better? ... 255
9.4.3 Distinguishing the impact of WP from the impact of diversity ... 256
9.4.4 Biased participants ... 257
9.5 Recommendations for future research and practice ... 257
9.6 Concluding remarks ... 260
References 263
Appendix A Positionality statement ... 279
Appendix B Reflexive journal excerpt – methodology ... 282
Appendix C Visual model of basic case study designs by Yin (2018, p48) ... 284
Appendix D Reflection on changes to supervision (Jen leaving) ... 285
Appendix E Demographic categories table for UKMED ... 287
Appendix F Reflections on the impact of Covid-19 and health on my PhD journey ... 289
Appendix G Examples of original webpage text data and initial coding ... 291
Appendix H Documents relating to ethical approval for the focus group study: approval letters, Participant Information Sheet, Consent Form, interview framework 293
H.1 Southampton Ethical Approval letter ... 293
H.2 Southampton ethics application form ... 294
H.3 Student Participant Information Sheet (Southampton) ... 308
H.4 Student consent form (Southampton) ... 313
H.5 Interview Framework (Southampton): ... 315
Appendix I Field notes following a focus group (Aberdeen example) ... 318
Appendix J Example of early UoS focus group transcript analysis and original thematic maps ... 320
J.1 Early coding framework ... 320
J.2 Early thematic maps ... 322
Appendix K Critical reflections on a two-person focus group ... 323
Appendix L Documents relating to ethical approval for the narrative interview study: approval letters, Participant Information Sheet, Consent Form, adverts 327
L.1 Full ethical approval (Southampton) ... 327
L.2 Conditional approval (Aberdeen) ... 328
L.3 Participant Information Sheet (Aberdeen) ... 329
L.4 Consent Form (Aberdeen) ... 337
L.5 Demographic data sheet ... 339
L.6 Recruitment email and poster (Aberdeen) ... 342

Appendix M Narrative interview framework and prompts 343
Appendix N Example of narrative analysis through McCormack's lenses (Sade's story) 347
Appendix O Reflection on Sade 350
O.1 Reflection on personal contexts: ethnicity and story-telling 350
O.2 Minimising socioeconomic difference: 351
Appendix P Maduka's passion for medicine 354
Appendix Q Rishi's carer role and interpreting Ayo reflection 355
Q.1 Rishi's carer role: 355
Q.2 Reflections on 'Ayo': what is difference? 356
Appendix R Summary of Mairi's story about an Unexpected Friendship: "we don't always know what's going on with our peers' home lives (.) or what support they have" 358
Appendix S Tariq's other stories 361
S.1 The influenced of 'privileged' students communication skills 361
S.2 A future in the profession 363

List of figures in this thesis

Figure 1: Overview of the research in this study 33

Figure 2: National awarding gaps for students in different groups from 2017-18 to 2019/20[36] 39

Figure 3: Secondary school type attended by UK population and by medical students 41

Figure 4: The three basic qualitative paradigms 61

Figure 5: Case study design model, adapted from Yin (2018) 67

Figure 6: Model of my case study design 67

Figure 7: Rates of ethnicity by population (English and Scottish population data taken from the 2011 census[168]) 88

Figure 8: A visual depiction of the interplay between institutional discourse and perceptions of WP 91

Figure 9: Shore et al.'s framework of inclusion 116

Figure 10: Visual representation of focus group themes 126

Figure 11: A visual representations of the narrative analysis findings 237

List of tables in this thesis

Table 1: An overview of case study design, recommended by Thomas[149] 68

Table 2: Demographic data for students enrolled at the UoS medical school from 2013-2017 78

Table 3: Demographic data for students enrolled at the UoA medical school from 2013-2017 82

Table 4: Key differences between the UoS and UoA gateway programmes 85

Table 5: Participant acronyms used in the findings and numbers of participants 124

Table 6: Self-reported gender and ethnicity of all focus group participants 125

Table 7: Representation of non-verbal features of the interviews 152

Table 8: Summary of UoS participants and their narratives 153

Table 9: Summary of UoA participants and their narratives 155

Table 10: Aaliyah's main stories (part 1) 209

Table 11: Aaliyah's main stories (part 2) 210

Table 12 Structural analysis of an extract from Tariq's interview 231

List of accompanying material

Dataset for focus groups, DOI: https://doi.org/10.5258/SOTON/D2649

Declaration of Authorship

Candidate name: Heather Mozley

Thesis title: Bursting bubbles: Exploring discourses, perceptions and experiences of widening participation in two UK medical schools

I declare that this thesis and the work presented in it is my own and has been generated by me as the result of my own original research. I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;

2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

3. Where I have consulted the published work of others, this is always clearly attributed;

4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

5. I have acknowledged all main sources of help;

6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

7. None of this work has been published before submission

Date: 30th September 2022

Word count (excluding appendices and references): 64,079

Thesis Supervisors

Lead supervisor:

Professor Sally Curtis

Professorial Fellow in Medical Education

Faculty of Medicine, University of Southampton

Secondary supervisors:

Doctor Kath Woods-Townsend

Principal Research Fellow

Southampton Education School, University of Southampton

Professor Marcus Grace

Professor of Science Education

Southampton Education School, University of Southampton

Also supervised in first year by:

Professor Jennifer Cleland,

Professor and Director of the Medical Education Research and Scholarship Unit,

Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

Acknowledgements

Firstly, I must extend an enormous, heart-felt thank you to my thoughtful, inspiring and generally awesome participants who made this research possible by devoting their valuable time to sharing their thoughts and experiences with me.

To my supervisor, Sally: you are an absolute powerhouse of energy and enthusiasm who leaves me feeling invigorated and inspired after every conversation. Your infectious excitement and enthusiasm for this research kept me going through the trickier days and reminded me why it was worth the slog! Thank you for your endless support and warmth.

I might never have seen the ‘wood for the trees’, and still be sat in an overwhelming puddle of paper transcripts without the insights and expert guidance of my secondary supervisors, Kath and Marcus. Thank you for helping me (and Sally) to reign in focus when I so frequently dove into the endless rabbit-warrens of interesting tangents suggested by my data. Thank you also to Jen, whose critical eye and methodological expertise were crucial for my development in my first few months as a PhD student.

I could not imagine undertaking this journey without the unwavering support and unconditional love of my incredible husband, Pete, and our sassy dog, Misty, who make me laugh until I cry and drag me away from the screen to take long, rambling walks come rain or shine. I undertook this research during Covid-19, so unfortunately, you (rather than academics) had to bear the brunt of and listen patiently to my frazzled rants about weird and wonderful qualitative methodologies. Sorry!

Chloe, my essential PhD buddy: you very quicky became part of my family too. Our daily catch up on Teams kept me sane(ish) and accountable(ish). Your belief in me, your cheerleading, and your exceptional editing skills have been invaluable. I never expected to have so much fun as I did with you (and Pete and Panda) at academic conferences.

The love, generosity and endless support of my wonderful parents, Pat and Sel, gave me the confidence in myself to undertake this journey. The skills and resources I have drawn on throughout this project are all thanks to you: you have always encouraged me to be independent, curious and persistent. And who knows where I would BRIE without your cheesy dad-jokes to keep me smiling!

A special mention must be given to my wonderful friends in my Hobart Extended Family: our holidays and adventures have provided so much laughter, joy and relief. I felt like the luckiest girl in the world to get so many delicious food hampers to snack my way through the last crazy week of thesis-writing. You know me so well.

Finally, thank you to the wonderful members of staff and students at the UoS and UoA who have supported me in big and small ways to undertake this research. The impromptu chats around the kettle, the ‘insider’ insights and perspectives on my data, reviewing mountains of ethics paperwork, and helping me to edit and refine my writing: you have all made a difference.

Definitions of key terms:

Widening Participation: the policies and practices which aim to facilitate greater representation and retention of students from all backgrounds at universities

B.A.M.E.: used to denote those who identify as Black, Asian or other Minority Ethnicity, where a collective term is required. Using an umbrella term to denote a wide range of real people who "*simply share the characteristic of not having White skin*"[3] is highly problematic as it deindividualizes and homogenises people with diverse identities, cultures and experiences. The 'ideal' terminology is highly contested and widely debated[4]. In this thesis, I have chosen to use the term B.A.M.E. (where each letter should be pronounced separately) in recognition of the constituent groups it seeks to include[4]. Participants have used a wide range of terms, including "ethnically diverse", "minority" and "BME"; direct quotes have not been changed.

SURGs: students from underrepresented groups and who are eligible for university support because they come from backgrounds currently underrepresented at their universities. It is worth noting that the groups of students who are underrepresented at a particular institution can vary, and this term therefore represents a (notedly) problematic way of referring to a very broad a complex spectrum of possible individuals.

Acronyms used throughout the report

AS: Administrative staff

B.A.M.E.: students who identify as Black, Asian or from another Minority Ethnicity where a collective term is needed (see in section 1.2 below)

BM6: Bachelor of Medicine 6-year course (Southampton gateway programme)

CDA: Critical Discourse Analysis

CHMS: The Council of Heads of Medical School

FiF: First in Family (to attend university)

G2M: Gateway 2 Medicine (Aberdeen gateway programme)

GP: General Practitioner

HE: Higher Education

IMD: The Index of Multiple Deprivation, which ranks small areas of England based on 7 domains of deprivation, including income, employment and health. Areas are ranked into Quintiles (Q's) 1-5, with Q1 representing the most deprived areas, and Q5 representing the least deprived

LSES: Low socioeconomic status

MSP: Medical School (web)Pages

Non-G2M: Students at the University of Aberdeen who have not completed the G2M programme

SURGs: students from underrepresented groups; groups which are underrepresented in universities/medicine compared to in the general population

TA: Thematic Analysis

TS: Teaching staff

SIMD: The Scottish Index of Multiple Deprivation, similar to 'IMD'

UCP: Undergraduate Course (web)Pages

UKCAT / UCAT: United Kingdom / University Clinical Aptitude Test, an medical school admissions test

UoA: University of Aberdeen

UoS: University of Southampton

WP: Widening Participation

Y1/2/3/4/5: The year (Y) of the degree programme in which a student participant is enrolled

Chapter 1 An introduction to this thesis

It was a typical autumnal day in England: drizzly, and a bit grey. I was sat in my office at the university campus where I was employed as a Widening Participation Officer for the faculty of Health and Life Sciences[A1]. My colleagues and I were debating the wording of our promotional literature for the summer schools we would be launching the following year to bring students from groups which were underrepresented in our institution onto campus for an intensive taster of university life.

I can't remember exactly what stimulated it, but I can vividly remember my manager saying "well, *obviously* we all benefit when we have more diversity, everyone knows that".

Everyone nodded vigorously, and maybe one of us concurred with a "yeah", before we resumed our articulation of how our prospective applicants would benefit from visiting *us*: raised aspirations, increased attainment, a chance to make friends, free pizza.

Considerations about what 'disadvantaged' students can gain from university participation have historically dominated research on widening participation (WP)[1], beginning with: what are the barriers to Higher Education (HE) and how can we remove them? More recently, researchers have asked about the challenges that these students experience when they arrive on campus, and have we achieved our institutional goals of facilitating their social mobility?

It is imperative to understand inequalities in student experiences so that we can take steps to eliminate them. However, the exclusive emphasis on how some students are 'disadvantaged' and what they are 'lacking' can lead to a harmful perception, even expectation, of them as deficient. Meanwhile, the potential rewards of increasing student diversity through WP for the university experiences of all students can simply seem so obvious that they are left unexplored and uncelebrated.

Understanding the outcomes of students interacting within a diverse cohort may be particularly important within healthcare degree programmes, as students must be adequately prepared to provide care to an increasingly diverse and multicultural society. Through undertaking this PhD, I intend to contribute knowledge about this topic

[A1] For more details about my background and motivations for this research, please see appendix A: positionality statement

by exploring diversity through discourses, perceptions and experiences of WP in two UK medical schools.

This is a complicated area. There are different discourses which underpin WP[2], and different groups of students are underrepresented in medical schools. Institutions therefore enact WP through a range of different practices and policies, which (in theory) align with institutional beliefs about the purpose and expected outcomes of WP. Diversity and WP may therefore have different meanings at different institutions. The local political and sociocultural contexts are therefore important for this research, and led me to adopt a case study approach to examine and illuminate the impacts of these often-hidden dimensions of WP.

The overall aims for this research were:

- To develop a critical understanding of the perceived purpose and impact of increasing diversity through widening participation on students' experiences in two UK medical schools
- To explore how the different institutional contexts, including their gateway programme structure, contribute to different perceptions and experiences of widening participation and student diversity

The following research questions were used to meet these aims

1. *How are widening participation and students from underrepresented groups presented on the gateway programme webpages?*
2. *How are widening participation and students from underrepresented groups perceived by medical school staff and students?*
3. *How can interactions between students from different backgrounds influence students' experiences during medical school?*

1.1 Thesis overview

I addressed these research questions through a qualitative research study, drawing on a social constructivist paradigm and employing a comparative case study design between the University of Southampton (UoS) and University of Aberdeen (UoA) medical schools. Both institutions run gateway to medicine programmes as part of their approaches to WP, which provide an alternative route to accessing and gaining a medical degree for students from underrepresented groups (SURGs).

The UoS introduced their 6-year gateway programme for medical students, BM6, in 2002, while the UoA began their 1-year 'Gateway2Medicine' (G2M) degree programme in 2018. The structural differences of these programmes symbolise the different institutional approaches to and understanding of WP, and there are some differences in entry criteria to the programmes. The findings generated in this research are considered in light of these contextual differences, permitting an examination into factors which affect understanding of WP and students' experiences of diversity in medical schools.

Below, I outline the main chapters in this thesis, including the three main research questions which guided the research:

1.1.1 Background (Literature Review and Methodology)

Chapter 2 of this thesis provides a general introduction to WP in the UK and medicine, while Chapter 3 includes a review of research on how WP and SURGs are constructed, perceived and experienced by university students and teachers, and through linguistic analyses of university promotional literature. In Chapter 4, I discuss the overarching methodology for the research.

1.1.2 Case Study Context and Discourses of Widening Participation

In Chapter 5, I introduce the two cases, the UoS and UoA medical schools, by presenting and discussing the national and local contexts.

In Chapter 6, I build on this understanding of the cases in relation to WP by presenting a Critical Discourse Analysis based on the first research question:

1. *How are widening participation and students from underrepresented groups presented on the gateway programme webpages?*

1.1.3 Perceptions of diversity and Widening Participation

In Chapter 7, I address the second research question:

2. *How are widening participation and students from underrepresented groups perceived by medical school staff and students?*

For this research strand, I held focus group interviews with medical school staff and students. I thematically analysed the data and interpreted the findings in relation to

their case study contexts. My analysis generated insights into the perceived benefits of having SURGs in medical schools. However, at the UoS, most participants observed that perceived differences between students from different backgrounds led to discrimination and limited integration in the early years of medical school. Although participants at the UoA felt that all students were equal, they questioned the extent to which 'difference' could be understood by others and whether it was retained despite processes of standardisation in medical education. There was therefore a lack of clarity as to *how* the perceived benefits of increasing diversity through WP were realised in these medical schools.

1.1.4 Experiences of diversity and Widening Participation

This contradiction prompted me to ask the third research question, which I explore in Chapter 8:

3. *How can interactions between students from different backgrounds influence students' experiences during medical school?*

In this chapter, I present interpretive stories based on narrative interviews with 8 medical students in Years 3-5. Participants shared stories about their interactions with medical students from different backgrounds which impacted their academic, psychological and social experiences during medical school. I used McCormack's framework of Multiple Lenses to narratively analyse the data and produce interpretive stories.

I reflect on key issues and concepts highlighted by the narratives about how interactions between medical students from different backgrounds influenced my participants' experiences in medical school.

1.1.5 Discussion and Conclusion

In Chapter 9, I provide a broad summary of the research findings before discussing each case in detail. Finally, I summarise the key contributions this research makes to the field, critically reflect on the research design and suggest practical considerations for future research and practices.

Figure 1 illustrates the chapters which include original research.

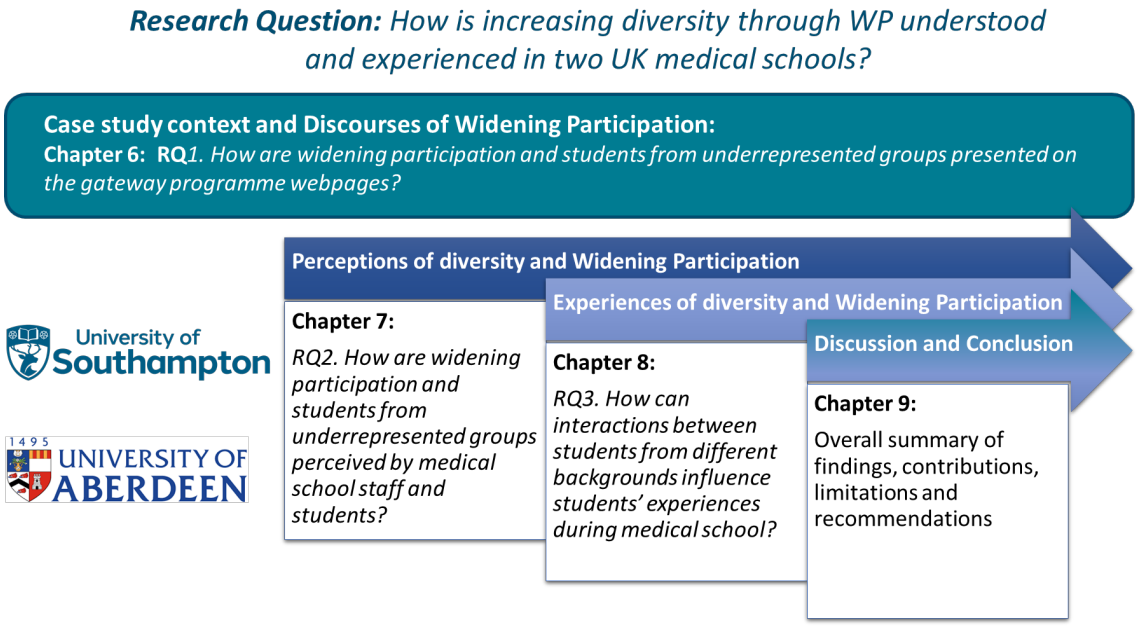


Figure 1: Overview of the research in this study

Chapter 2 An Introduction to Widening Participation

Inequalities within society are broadly reflected within HE. In the UK, White students from socioeconomically advantaged backgrounds are overrepresented in universities; they are also the most likely students to achieve a 2:1 or a 1st, and to progress into highly skilled employment or further study. Universities seek to address educational inequalities through Widening Access (WA) and Widening Participation (WP) policies and activities[5].

2.1 Defining Widening Access and Participation

WA and WP are often used interchangeably in both research and practice. Nicholson and Cleland define WA as emphasising: "*more the equality or fairness of the selection processes that act as a gateway to HE. This may refer to specific selection policies that increase the matriculation of certain unrepresented groups*"[6 (p232)]. Contextualised admissions and reserving places for students from underrepresented groups are examples of WA[6].

Nicholson and Cleland define WP as *"the policy that people such as those coming from disadvantaged backgrounds, mature students, students from ethnic and cultural groups and disabled students should be encouraged to take part, and be represented proportionately, within higher education*"[7 (p. 231)]. WP policies and activities are related to equality of opportunity to take part in university throughout the student lifecycle, including access (entry), success (continuation and attainment) and progression (into skilled employment and further study). WP therefore incorporates pre-university outreach activities like summer schools as well as initiatives to support academic attainment or continuation offered during university.

In practice, WP has historically focused on improving *access* to university (which perhaps accounts for the confusion associated with the terminology). However, simply admitting students is not sufficient to ensure that all students can successfully participate in and thrive at university; the current culture of HE and medicine and existing policies and practices may not be appropriate or adequate for everyone[8-10].

2.2 Who is underrepresented in UK universities?

The groups of students who are underrepresented at university has changed over time. In 1997, the Dearing report highlighted the underrepresentation of students from lower socioeconomic backgrounds, certain ethnicities, and those with disabilities. A key

recommendation of the report was that allocation of government funds should prioritise institutions which could "*demonstrate a commitment to widening participation, and have in place a widening participation strategy* [and] *a mechanism for monitoring progress*"[11.(p.107)].

Progress has been made in reducing some inequalities in accessing university. Historically, women were underrepresented in HE, but now account for 56.1% of the undergraduate population[12]. In 2020, a Russell Group report noted that "*The most under-represented students are 60% more likely to enter university now than they were ten years ago, and 30% more likely to enter Russell Group universities than five years ago. However, gaps by social and geographical background and by ethnicity and disability persist*."[13 (p2)].

On their website[14], the Office for Students (the independent regulator of higher education in England) report gaps in equality of opportunity in relation to university access, success and progression for:

- students from areas of low higher education participation, low household income or LSES
- some B.A.M.E. students
- mature students
- disabled students
- care leavers

They also note that there are additional groups of students who experience educational inequalities and who may have support needs, including:

- carers
- people estranged from their families
- people from Gypsy, Roma and Traveller communities
- refugees
- children from military families.

Students who are First in their Families (FiF) to attend university are less likely to access university than those with a family member who has completed HE[15]. In Scotland, there are inequalities in access to university for students living in rural or remote locations[16].

Students from groups which are underrepresented in university are variably termed as from 'underrepresented minorities (URMs)', from 'diverse' or 'non-traditional' backgrounds, or as 'WP students, reflecting that they are the primary targets of WA and WP activities. In this thesis, where a broad term is needed, I use Students from Underrepresented Groups (SURGs).

2.3 Why are there inequalities in access, success and progression in UK universities?

There are multiple barriers to university for SURGs. Reay describes the application processes to university as "*elite processes masquerading as meritocracy*"[17] (p54), with universities failing to adequately acknowledge the multiplicity of ways in which the education system disadvantages some groups of students while privileging others. The cost of studying at university is considered to be prohibitive for students whose parents cannot offer financial support and whom they may also be supporting[18]. These students are more likely to consider university fees as a debt to be avoided rather than viewing HE as an investment[18]. This is a particular issue for students from geographically rural and remote areas, where the fear of university debt is exacerbated by the additional costs associated with long-distance travel (such as an aeroplane or boat trip from an island) and accommodation, where commuting to university from home is not an option[16].

Typically lower levels of academic attainment at key stages 4 and 5 may also preclude many SURGs from accessing university, and partially explain the gap in progression to university[19]. The type of school attended has a confluent effect with grades: students attending state schools tend to achieve lower grades and are less likely to attend university than those attending independent schools[20]. Rural students may not have "*access to the full range of subjects*", restricting their access to some university courses with particular entry requirements[16(p84)], including Medicine.

Once enrolled at university, FiF students can be faced with a lack of transparency about the "*rules of the game*" of university life; of "*not having access to the reservoir of knowledge subsumed through lived and generational university experience*" [21 (p47)]. Many report feeling socially marginalised, finding it difficult to fit in or don't feel that they belong on campus[22,23], which can result in a reluctance to participate in "*typical"* university experiences such as joining societies, asking university staff for help or speaking up in class due to fear of being exposed as different or less capable[24-28]. They

can be minoritized, marginalised and 'Othered'[A2] in a space in which the middle-class are valorised[29]. Students have described themselves as feeling lost, or as though they are entering a "*foreign world*"[30] as they navigate the cultural spaces of HE. Frequently, there are social divisions, with friendships commonly forming between students from similar backgrounds in terms of class and ethnicity[31,32]. SURGs report being subjected to explicit discrimination and microaggressions from peers and university staff[33,34]. University campuses are not equitable or equally accessible territory for all students.

Nonetheless, most SURGs progress through university and successfully graduate, but there are significant gaps in both retention and academic outcomes for some groups. The awarding gap is the difference in the proportion of students achieving a 'good' degree (a 2:1 or 1st overall) seen between groups of students from different social backgrounds[35]. In 2019/20, 86.6% of White students achieved a good degree, compared with 68.2% of Black students, an 18.4 percentage point gap. Similarly, the awarding gap between students from IMD Q5 and Q1 stands at 15.2 percentage points, with 89.4% and 74.2% achieving a 1st or a 2:1, respectively[36].

Reductions in awarding gaps were slow, at an average rate of 0.5% per year for the past decade[37] until 2019-20 where a slightly greater reduction across groups was seen (see figure 2 below). As the impact of Covid-19 necessitated drastic and unprecedented changes to university teaching, learning and assessments in the latter half of that academic year, university practices (rather than individual student deficiencies) are strongly implicated for differential outcomes.

[A2] 'Othering' refers to the ways in which individuals use language to create psychosocial distance between themselves and people they perceive as different, often drawing on stereotypes to construct them as "peculiar", and therefore less important or worthwhile[29-30]

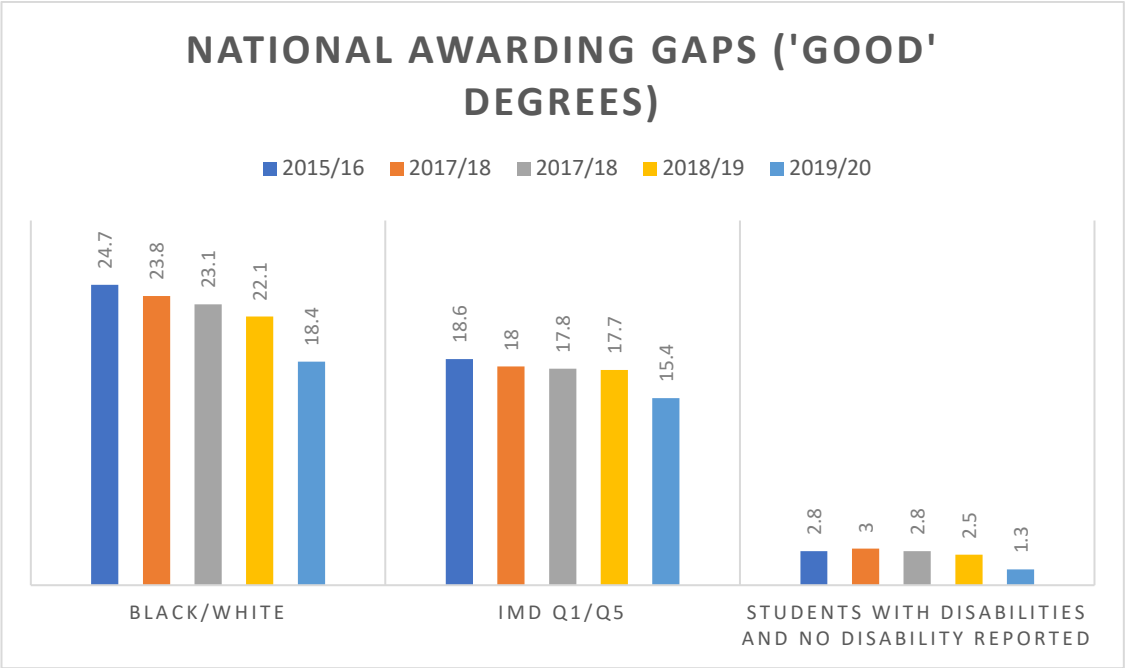


Figure 2: National awarding gaps for students in different groups from 2017-18 to 2019/20[36]

Access, retention and awarding gaps are also evident among medical students from different social groups and ethnicities[38-40].

2.4 Widening Participation in UK Medicine

Historically, most medical students were White, middle-class males from families with experience of HE, and often the medical profession[41]. In 1998, the Council of Heads of Medical Schools encouraged medical schools to examine and adapt their admissions processes to minimise potential bias to ensure that the social, cultural and ethnic backgrounds of medical graduates should broadly reflect the diversity of patients[42]. In 1999, funding was allocated to increase the number of medical student places; universities who could demonstrate that they planned to diversify their cohorts were prioritised to receive this funding[43]. The Higher Education Funding Council for England also funded pilot schemes of gateway to medicine programmes at three UK institutions, including the University of Southampton's BM6 programme[43,44]. However, in 2012, the Office for Fair Access denounced these efforts as insufficient: "*medicine has made far too little progress and shown far too little interest in the issue of fair access. It needs a step change in approach*"[45(p. 43)].

Since then, medicine has become more accessible to students from previously excluded ethnic groups and for women; the Medical Schools Council Selection Alliance 2019 Report revealed that more females apply to and enter UK medical schools than

males[46]. In 1974, only 2% of UK medical graduates were from ethnic minority groups, rising to 40.7% in 2016, making the medical workforce more ethnically diverse than the UK population as a whole (although women are underrepresented at the higher echelons of medicine, and some ethnicities remain underrepresented[41]). Applications to medicine and recruitment of students from low-income families with no experience of university, however, remain stubbornly low[46,47].

In 2013, the General Medical Council reported that 85% of UK medical students had never received free school meals, compared to 8% who had (and 7% 'unknown')[48], which is significantly lower than the 26% of entrants to HE who have received free school meals. Although only 7% of UK school-aged children attend fee-paying or independent schools, more than 30% of all trainee doctors attended one before enrolling onto their medical degree programmes[49]. Such schools provide a wealth of opportunities and resources to support their students through a highly competitive application process[50,51]. A further 34% had attended academically selective state schools, which are generally higher-performing, better resourced, and typically attended by more affluent families[20]. Again, this represents a much higher figure than the number of students in the general UK population (Figure 3 below, data from The Sutton Trust[52]). Consequently, the profession is described as being dominated by a social "*elite*"[48,53], and students from persistently underrepresented groups continue to be considered as being from "non-traditional medical backgrounds". In 2018, the bidding process for the 1500 new medical school places placed significant value on increasing WP. Five new medical schools were also created in geographic areas of England struggling to recruit doctors[54].

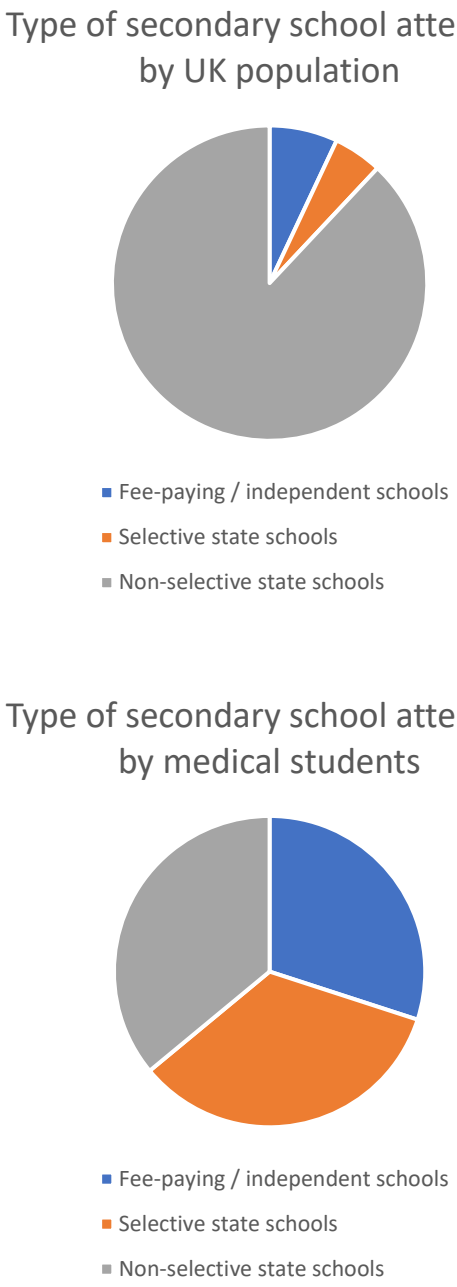


Figure 3: Secondary school type attended by UK population and by medical students

The representation of students from LSES families is lower in medicine than in other competitive vocational degree programmes such as journalism[45,55], suggesting that there may be barriers particular to medicine. Studies have identified systemic barriers such as:

- high grades required for entry which do not recognise the contexts in which those grades were achieved[51]
- lower rates of aspiration to medicine[56,57]

- a lack of accurate information about the unique medical degree application process including inflated perceptions of required grades[58]
- a lack of appropriate support for UK Clinical Aptitude preadmissions tests (now known as UCAT), resulting in lower scores[51]
- teachers undermining students' confidence in successfully applying to medical school[59-61]
- students being the first person in their family to go to university[59,62,63]
- perceived conflicts between the medical school and professional environment and class identity[61,64].

In Scotland, rural and remote students have fewer opportunities for educational achievement than their peers[16,65,66]; limited opportunities to undertake Science courses at Scottish higher levels[16], can delay or prevent students from applying for a medical degree.

Strategies to support SURGs to access medicine include outreach activities with targeted schools[5], financial support[5], mentoring[67], contextualised admissions[68], academically focused summer schools designed to help pre-university SURGs to pass their exams and increase their aspirations to apply to medicine[69], and Gateway to Medicine degree programmes[40,70,71].

Outreach activities and summer schools tend to be positive experiences for participating students[(e.g. 65,69)], but successful applications from students who are disadvantaged by the application system remain low[6,72]. Such activities are costly, and their evaluations are often limited to local activities which are specifically designed to increase applications to the host institutions[6]. They also often draw on a deficit framing of SURGs (discussed in chapter 3), inferring that these students require "fixing" in order to fit into the world of medicine, rather than denoting a requirement for the university to adapt to be equitable for all students[73-75].

Gateway to Medicine programmes are a rapidly increasingly approach to WP in medicine[71], with 19 recognised by the Medical Schools Council for entry in 2022[76]. Gateway programmes are exclusively for SURGs, usually including a preliminary period of education, support and healthcare experience to support students' transition into HE and Medicine[71]. Gateway programmes use a contextual admissions process which recognise the academic grades in the context of the applicants' backgrounds. The academic criteria are reduced compared to standard entry programmes, commonly with between a 1-3 grade reduction. Although gateway programmes are

increasing the numbers of SURGs in medical schools, the number of applications from lower income students to medicine would need to increase five-fold for the medical student demographic to be representative of the general population[77].

A multi-site review of educational outcomes of gateway programmes revealed that gateway programmes are successful, with most gateway students progressing through their programmes and graduating as doctors in a range of specialties[40,78]. Evaluations of *how* the programmes work and *why* they are successful is mostly limited to small, single-site studies[79-81]. As the selection processes, structure, curricula, and support offered to gateway students vary considerably between institutions[71,81], closer inspection of the programmes in their respective contexts is desirable and a necessary next step for understanding WP in medicine.

In 2021, researchers at the University of Aberdeen published an evaluation of their G2M programme, exploring what had contributed to the current success of the programme and identifying challenges[81]. They analysed promotional materials for G2M, interviewed and held focus groups with staff involved with the G2M programme, and held focus groups with G2M students. Both staff and student participants reported that during their gateway year, students established a sense of belonging to medicine, the University and their city, and gained confidence. Factors like getting to know the city and campus, studying a relevant curriculum (which they helped to shape through feedback), gaining work experience and developing relationships within small groups of other students and staff supported their successful transition to the medical degree programme, and prepared them for the social and cultural shifts to medicine. Successfully passing the programme enhanced G2M students' beliefs that they could make a successful application to, and subsequently study medicine. However, the actual number of students progressing to study medicine is not reported, and the student participants were currently in their gateway year, so experiences of progressing to and integrating in the medical degree programme or medical school are not included.

Despite significant investments and encouraging vocal commitments to WP, most institutions fail to provide specific numerical targets (either percentages or actual numbers) for how many SURGs they hope to recruit into their standard-entry medical degree programmes. In a review of 33 long-standing UK medical schools, only one, Aston medical school, was identified as making a specific numerical aim of offering "up to" 40% of their places to SURGs meeting at least one of their WP criteria[77]: while target-setting is laudable, the caveats of "up to" and meeting only a single WP criteria

are unlikely to result in significant, meaningful change. The reluctance to make a meaningful and binding commitment to WP by setting targets could stem from a fear of failure or a lack of belief in success[77] – or perhaps a lack of understanding of the potential rewards of WP. Apampa and colleagues argue that both national and local commitments to WP via the setting of quotas and institutional collaborations are required to significantly increase the number of SURGs entering medicine[77].

Evidence is emerging on the experiences of SURGs in medical schools[59,62,63], their academic outcomes[40,51,82] and their post-graduation career pathways[83,84]. In the US, studies have identified myriad perceived benefits of increased racial and ethnic diversity in medical student cohorts[85-89], but there is a dearth of research situated within a UK context that examines the perceived impact of increasing diversity in a much broader sense through WP initiatives. A deeper and more critical analysis of research on the participation of SURGs in UK medical schools is included in the following chapter.

Chapter 3 How are underrepresented students perceived and constructed in HE and in Medicine?

I begin this chapter by discussing how SURGs, particularly LSES and FiF, have been constructed by universities and researchers in terms of the skills, qualities, and attributes they are perceived to lack: the Deficit Discourse. I consider the potential impact of this discourse on how WP and SURGs may be perceived, and how it could affect students' experiences. I then present research showing how some SURGs have been Othered and marginalised at university.

In addition, I explore the literature that highlights the value of increasing the diversity in universities; reports on the qualities and insights that SURGs mobilise to succeed in HE, and the contributions they make in the classroom. Within medicine, such studies tend to focus on *ethnic* diversity, meaning the potential rewards of cohort diversity across a broad range of factors are not clearly understood and may not be valued. Moreover, most research on medical SURGs only include participants on *standard-entry* medical degrees, whose experiences may be very different from those of gateway students. I consider how expanding knowledge in this field could improve experiences of medical school for all students, therefore setting the scene for why a case study investigation into the perceived impact of increasing diversity through WP on the experiences of students at the UoS and UoA medical schools is warranted.

3.1 The deficit discourse: constructions of underrepresented students as "lacking"

"The prevailing rhetoric on social class in higher education tends to employ a deficit mindset" [75 (p87)]

'Discourses' are assumptions or patterned ways of thinking about particular objects or phenomena[90]. They are powerful ways of constructing and presenting discursive objects in particular ways, to make certain ways of thinking about them seem true or factual[91,92]. The normalisation of some discourses, and the absence of alternative ways of presenting the world, affects what can be known by enabling, shaping and also limiting ways of thinking about particular topics[93].

Research on SURGs in HE and medicine often draws attention to their lower attainment on admission, the social and cultural barriers they face as HE students and the awarding and employment gaps at the end of their journeys[21-23,25,33,69,94]. Exclusively focusing on these challenges can lead to perceptions of SURGs (and their parents and teachers) as deficient compared to their peers, facilitating the deficit discourse.

Current models of WP can contribute to a deficit perspective. WP initiatives often involve remediation and seek to support SURGs to better fit into existing systems; they have not resolved gaps in access, attainment or retention[21,73]. For example, summer schools and academic support are short-term, quick-fix provisions which aim to raise aspirations and improve the academic abilities of SURGs[21,69,95], by filling up "*supposedly passive students with forms of cultural knowledge deemed valuable by dominant society*"[96(p75)]. In supporting SURGs to "*better fit*" into institutions, we risk "*manufacturing sameness*" and undermining or marginalising the unique contributions these students could make to their communities[97,98]. Interventions which problematise inequitable university practices or which entail integrated, evidence-based programmes that are "*sustainable across increasingly diverse cohorts*"[21(p36)] are uncommon.

Policies such as contextualised admissions for SURGs challenge inequitable selection practices; they recognise the value and significance of students achieving their academic grades in challenging circumstances and can counter the deficit mindset by focusing on future potential. However, this perspective is not always fully understood or appreciated. Admitting students with lower grades on entry has been described as a "compromise" on the high educational standards of the medical field[99], even though all university students are required to pass the same exams to matriculate into the profession[100].

As noted above, research on the experiences of SURGs in medical schools often highlights the challenges they experience in their education journeys. Medical SURGs have reported a poor sense of belonging and being discriminated against for their differences[34,59,61-63]. Medical SURGs' have reported feeling a "*social and cultural distance*" between themselves and their more "*traditional*" peers[62], and finding it hard to find common ground socially with their more privileged peers and members of their academic faculty[63]. In an Australian medical school, FiF students described themselves using self-deprecating language such as "*dirty*", contrasting their descriptions of traditional students as "*polished*"[62]. Many described feeling like "*imposters*" and that they were "*not good enough*" to be a "*proper med student*". Participants in the above studies were limited to students in Years 1-3 enrolled into a standard-entry medical degree; it is unclear whether these beliefs persisted as the students successfully progressed through to the later years or as they continued into the profession. Moreover, some students did appreciate the value of their difference for medicine, such as valuable insights into communities which are typically underserved medically.

Medical SURGs have also been marginalised and alienated by other students and staff. Beagan described a number of microaggressions and incidences of "*everyday classism*" occurring in a Canadian medical school, inhibiting working-class students' ability to fit in[34]. For example, working-class patients were persistently pathologized in clinical case studies as drug addicts, alcoholics or smokers[34]. As the Canadian medical school context is different socially and culturally from UK medical schools, the findings cannot be generalised, so there is value to studying staff (as well as student) perceptions of WP and diversity in a modern UK context. Moreover, Beagan's research was conducted in 2005, before the massification of HE and drive for inclusivity, so with curriculum reviews and revalidations, including recent calls to decolonise curricula, one would hope or expect reduction, if not eradication of classism from staff in medical schools. However, similar microaggressions relating to poverty continue to be reported in medical classrooms[62,101], contributing to the normalisation of harmful discourses about impoverished patients and the suitability of low-income students for studying and belonging in medicine. Senior physicians recently sparked controversy on Twitter by implying that only students who can afford to pay the exorbitant costs of American medical education should choose to pursue medicine[101].

Such research helps to highlight areas for institutional improvements and institutional responsibilities to provide more equitable opportunities for their students. However, with such an abundance of research foregrounding the challenges SURGs experience accessing and navigating university, it is unsurprising that a deficit discourse of SURGs prevails. Without alternative discourses, deficit-models can lead to framing students as deficient, causing *expectations* of deficiency, and have troubling consequences for those students[102]. "*Perpetual focus on deficits and gaps has caused us to expect deficiency*" [102] (p18). Macias asks, "*how can we be committed to the growth of people if we have adopted a deficit-focused approach to engaging them?*"[102(p20)]. Moreover, if students perceive low expectations of them from their educators, how can they be expected to believe in their own abilities, and act accordingly? Our expectations of students can become manifest: "*low expectations have the potential to change lives as much as high expectations do. While low expectations are fuelled by negativity and doubt, high expectations are powered by positivity and enthusiasm*"[102 (p20)].

Explicitly portraying SURGs as negatively different from their peers can lead to Othering and inhibiting sense of belonging for SURGs in universities[22,23,31] and in medical schools[59,62,63]. This can, in turn, negatively impact interactions between students from different backgrounds, creating social and symbolic distance between students, though which deficit or other negative perceptions are reproduced. Concerns

have been raised that SURGs may minimise or downplay their unique qualities to fit in and feel they belong[97], reducing the potential for the medical school to benefit from the different perspectives, knowledge and skills that these students can offer because of their backgrounds (such as cultural insights[62,85] or a desire to give back to their communities[59,84,103]).

The existence and potential impact of a deficit discourse has recently been recognised by the Medical School's Council. Their 2019 Selection Alliance Report advised that: "*The narrative needs to change from one that looks at deficits in individual students that need to be addressed to one that looks at the system of education and how it can be developed to ensure all students thrive*"[46(p6)]. In this statement, they recognise that constructing the conditions which facilitate the success of students from all backgrounds is an institutional responsibility and requirement. However, they offer little guidance in how to facilitate this important change or recognise when it has occurred, and they set no targets for achieving the goal.

Participants in the studies discussed above were SURGs who did not access medical school through a WP programme, most commonly being FiF students who enrolled directly onto a standard-entry degree[59,62,63,104]. Their experiences, perceptions and interactions with other students may differ from the gateway students at the UoS and UoA, who have enrolled onto a supportive programme in which they learn exclusively with other SURGs in their first year. A critical examination of institutional discourses about and perceptions of SURGs on gateway programmes is thus warranted.

3.2 Integration and Othering of SURGs

The prospect of making new friends is one of the most exciting and daunting aspects of progressing to university[32], and university friendships play essential roles in student well-being, sense of belonging and retention in HE. Adler and colleagues noted that "*having a friend is a form of power*"[105 (p162)]. Although most university students perceive making friendships as an individual responsibility; classed and racialised factors, wider social judgements and expectations and external factors such as living at home, shape friendship groups[31]. Friendship is intimately tied to social-identity formation and social positioning, and thus impacts how students develop their identity as a student and whether they feel they belong in HE[31]. Friendship and a sense of closeness and community between medical students may be particularly important for student wellbeing[106] and professional development[107]. Learning with peers increases academic self-efficacy, which is linked to higher levels of attainment and retention[108].

McPherson and colleagues stated that "*similarity breeds connection*": that people generally prefer to socialise with people they perceive as like themselves, a phenomena they call "homophily"[109]. University students are no exception, typically forming communities with those who are similar in terms of class, age and ethnicity[31,110]. These friendships are thought to provide understanding, comfort and belonging, particularly important for students whose identities fall outside of the dominant culture of HE students[31,111,112]. Although White, middle-class students' friendship groups are often homogenous, they have perceived the "*sticking together*" of their Black and working-class peers as hostile and self-excluding[32,113], and the students themselves as different, difficult, disruptive and threatening[32]. The implications of these attitudes for Black and working-class students within such a context are serious.

Homophily has also been observed among medical students. In Australia, medical students in Years 1-3 from underrepresented groups have reported difficulties interacting with students from majority groups, particularly "*legacy*" students (those with family members who are medics), due to a perceived lack of relatability and shared experiences[62]. However, as others have noted, there has been little scrutiny of the ways that SURGs are perceived by students from dominant cultural groups, or by the staff who teach them[17,33].

Woolf and colleagues identified that Year 2 medical students at a London university generally formed friendships with peers of the same gender and ethnicity[114]. Moreover, these friendships may be linked with attainment; the students in their sample tended to perform similarly in exams to those in their close friendship groups (based on Year 1 grades and expected Year 2 grades); although it is unclear whether these findings were related to prior attainment. Some friendships were also formed from random teaching groups; the authors suggest that providing opportunities for cross-cultural interactions in the curriculum could support the reduction of differential attainment through increasing trust between student groups, challenging stereotypes and increasing students' confidence in group interactions.

Encouraging meaningful cross-racial and cross-cultural interactions has been widely advocated by equality and diversity researchers in HE; the mere presence of a diverse cohort is considered insufficient to unlock the potential rewards of diversity (such as cultural knowledge exchange) or eliminate the racial and classist discrimination that students continue to experience[39,101,114-116]. Most studies on interactions between medical students from different backgrounds are quantitative or briefly touch upon these interactions within a broader topic of SURGs' experiences during medical school.

This thesis explores in detail the types and qualities of interactions between medical students from diverse groups, and the effects of those interactions on experiences of medical school for all students.

3.3 Perceptions of SURGs as valuable

Not all studies on perceptions of SURGs are negative. Many university staff and students perceive WP as valuable, and SURGs as possessing educational strengths and insights which they can contribute to their class discussions[75,103,117].

In McKay and Devlin's study on "*challenging the deficit discourse*", many staff participants commented on the laudable determination and persistence frequently demonstrated by their LSES students, who they deemed more conscientious than their more advantaged counterparts. This work ethic was attributed to a perception held by LSES students that they needed to exert extra effort to overcome the perceived challenges they faced in entering the unfamiliar territory of HE, with novel cultures and systems to negotiate. These interpretations echo findings by Reay and colleagues on how working-class students experience HE in the UK[22,23]. McKay and Devlin revealed that the extra efforts of the LSES students often paid off, resulting in comparable or even better academic achievements[33]. Successful students described themselves as independent learners compared to their peers, who often expected to be "spoon fed" information. Staff participants concurred, describing how LSES students enacted greater agency in their education by asking for help and support when they required it to ensure that they achieved their goals.

McKay and Devlin's participants were selected, as the title of their study suggests, because they were members of staff who were known to play an active role ins supporting LSES students. The aim of the study was to highlight positive perceptions and experiences of LSES students, and the findings are therefore explicitly biased. Some of their findings conflict with reports of FiF participants in a study by Talebi and colleagues, who reported that their FiF student participants were *less* likely to ask university staff for help with personal and academic issues due to perceptions of stigmatisation, and fears of appearing less capable[27]. Although the studies are not directly comparable, the findings of McKay and Devlin indicate that one consequence of staff having high expectations and positive perceptions of SURGs may facilitate a safe environment in which SURGs feel comfortable seeking support.

Marshall and Case presented a narrative case study of a South African engineering student, Mandla. They illustrated his skilful mobilisation of the resources and coping strategies he acquired through living in conditions of "*extreme disadvantage*" to succeed at university[103]. For example, Mandla demonstrated great resilience and initiative in applying to university at all, and utilised the leadership skills he developed as a carer for his siblings to support peers on his course who were experiencing low motivation and self-doubt. The authors argue that students' non-traditional backgrounds should not be presented as a problem to be fixed; rather, they question how the university learning environment can be reframed to "*make it possible for more students to experience higher education in the transformative and 'paradigmatic' way in which Mandla does*"[(P502)].

This may require transformation on behalf of the institutions; a move away from educational institutions as sites of knowledge "reproduction" to places which welcome and embrace a multiplicity of knowledges. For example, Yosso's model of community cultural wealth[96] develops Bourdieu's classic theory of social and cultural capital, which suggests that cultural resources (such as language, knowledge and skills) are reproduced and inherited primarily within families, and can be acquired through schooling[96,118]. Bourdieu posited that some forms of capital are unfairly valued more highly than others in education and society. Which types and expressions of knowledge (a type of cultural capital) are valued is dictated by the dominant class (typically White, middle-class), whose power and position enable them to not only mandate what is valued, but also to reproduce them through societal systems which they control, like schools and universities[41].

Bourdieu's theory has been criticised for its implied determinism[119], that reproduction is unavoidable. However, mindless reproduction of particular forms of capital could be challenged by decolonising the curriculum and becoming open to alternative forms of knowledge and capital[120]. Yosso identified six forms of capital that SURGs use to "*survive and resist macro- and micro-forms of oppression*"[96(p77)] in HE. These forms of capital are developed throughout their (often atypical) journeys to university, and can be mobilised as assets in their classrooms:

1. Aspirational capital (the resiliency to hold onto hopes about the future in the face of structured inequality)
2. Linguistic capital (the ability to communicate in more than one mode, language or dialect)
3. Familial capital (cultural knowledge nurtured among family and friends)

4. Social capital (network providing resources such as instrumental and emotional support)
5. Navigational capital (the skill of manoeuvring through social institutions, particularly those not created with marginalised groups in mind)
6. Resistant capital (the recognition of inequity and the drive to challenge it)

O'Shea identified that FiF student participants in their study particularly drew on aspirational, resistant and familial capital to succeed at university. For example, discouragement or disbelief from friends or family about participants ability to get into or succeed at university, typically framed by WP researchers as barriers to university, were characterised by their participants as a "*powerful motivator for engaging and persevering*" in HE [21](p72). Participants were thus positioned as resilient and agentic. Emphasising positive assets that students can bring rather than exclusively focusing on the systemic barriers they face at inequitable institutions may help to mitigate the damaging effects of the deficit discourse (although it is important to note that their study included only students who had successfully entered HE). O'Shea expanded Yosso's framework to accommodate their participants' "*experiential capital*": prior university experiences that facilitated learning success in HE, and enhanced their navigational capital.

The experiences of students undertaking non-vocational HE courses (as in the above studies) may not capture the experiences of students studying medicine. Studying medicine is academically challenging and highly demanding of students' time and resources due to the clinical experiences and responsibilities afforded to students during their training[121]. Although the above findings offer insights into qualities and attributes of WP university students, the unique context of medicine compared to other HE programmes may therefore reveal different perspectives on students from WP backgrounds.

3.3.1 The value of WP in medicine

The medical profession must be held accountable for recruiting and training a workforce who are representative of and are prepared to deliver high quality healthcare for patients from all backgrounds. It is often argued that this would be best achieved if the characteristics of doctors reflected the patient population, and this is a common argument used to promote the use of WP[122,123] (also see -1711941184.454.186336). For the UK medical workforce to be representative of the general population, the number of students applying to medicine from low-income families would need to

increase five-fold, requiring a drastic shift in the current approaches to WP[77]. While this does not diminish the value of striving for greater representation within the current framework of WP, it does highlight the need to emphasise other immediately accessible and long-term outcomes of WP, such as:

1. Improving distribution of doctors to underserved areas and capacity to provide care
2. Improving physician competence by enriching the student learning experience for all, enabling students from any background to care for a more diverse population by increasing empathy, understanding of difference and communication skills with those who are different (discussed below).

WP improves capacity to provide care

In the UK, the healthcare profession is struggling to meet the changing needs of an increasingly ageing and multi-cultural population. The numbers and distribution of General Practitioners (GPs) are failing to match community needs, particularly in areas of socioeconomic deprivation[55,84,100,124], and in rural and remote locations[16]. A government strategy to increase the number of places available for medical students is not likely to be sufficient to solve the issue[125,126]; medical graduates are increasingly choosing to take a career break or leave the profession after completing the post-graduate Foundation Programme[127]. Those who stay, and hail from a more traditional medical background, are less likely to become GPs[48,128] or practice in a deprived and underserved community[84].

In Scotland, Dowell and colleagues[84] found that classed parental occupation at the time of starting medical school correlated with likelihood of working in a deprived practice. Medics with at least one parent in a higher managerial or professional occupation were much less likely to work in a highly deprived practice than those with parents in routine or semi-routine occupations (7.2%, compared with 23.5%). Variables such as medics' age and gender showed no significant relationship with working in a deprived practice. The validity of the result is arguably limited as (inevitably) so few (only 4.3%) of survey respondents came from an LSES background; however, the clear preference of students from higher SE backgrounds for practising in more economically advantaged regions suggests a strong correlation between economic background and *lack* of intention to practice in underserved areas. A similar trend is emerging internationally: US research demonstrates that physicians from underrepresented groups are more likely to care for underserved communities[85,123,129,130].

The findings of a qualitative research study in Australia[83] suggested that medical students from LSES backgrounds are more likely to serve as GPs, an understaffed area of medicine, rather than pursuing an alternative specialist qualification[83]. In one UK study, FiF medical students were also more likely to report their intention to work as GPs after graduating[59]. As these findings are based on a limited sample of 20 FiF students from a single university, further research is required to explore this further; ideally, longitudinal research could examine whether intentions correlate with their eventual choices upon graduation.

The General Medical Council's national training survey revealed that students who attended state-schools were more highly represented in GP (46%) than their privately-schooled peers (31%)[48]. Concerns have been raised that this preference for less competitive specialisms might reflect lower levels of confidence or attainment in SURGs[123]; however, FiF participants in a UK study described an attraction to career paths like GP due to a good work-life balance, whereas specialisms such as surgery were perceived as requiring undesirable personal sacrifices such as longer working hours and high levels of clinical responsibility[59]. It is also worth noting that progression to specialties like surgery incur exorbitant costs through additional, self-funded study and examinations, which may prohibit students from low-income families from choosing such pathways.

Kelly-Blake and colleagues[123] warned that if maldistribution to underserved communities underpins recruitment and selection efforts of diversity, SURGs may be perceived as a "*means to an end*" rather than being valued for the qualities and insights they can bring to the learning and clinical environment.

WP improves competence by enhancing medical education

Greater medical student diversity helps to prepare *all* medical students to provide higher quality care for diverse patients. UK medics are increasingly interfacing with a more diverse population[45]. Their education needs to reflect this to ensure that they are prepared to provide empathetic and sensitive care for *all* of their patients.

Increased exposure to an ethnically diverse medical student cohort has a positive effect on the education and outcomes of trainee doctors[131], including improved critical thinking and problem-solving skills[132,133], cultural sensitivity[89,134] and patient-rated quality of care[122,135]. Through enabling diverse students to exchange information and share value systems of different cultures, students learn to question and challenge both

their own beliefs and those implicit in the curriculum. This is thought to expand their learning potential and ability to provide holistic, patient-centred care[85].

Research from the US on learning in an ethnically diverse cohort has revealed that medical students value learning with others who are different from themselves. In a study of two American medical schools, 84% of students reported a belief that the medical profession should represent the country's racial and ethnic composition and supported the use of WP initiatives to achieve that goal[88]. Participants also reported that diversity enhanced classroom discussions and improved their understanding of medical conditions and treatments: 76% of students felt that a diverse student body helped them to work more effectively with those from different backgrounds and 86% felt that diversity in the classroom was more likely to foster serious discussion of alternative viewpoints, a skill that would enable them to communicate and empathise more effectively with their patients from different backgrounds. Overall, most students felt that student diversity was a rewarding component of their education; though their findings are limited to understanding the perceived impact of racial and ethnic diversity, and based exclusively on Likert scales, meaning that in-depth or nuanced understanding of diversity in these institutions was not explored.

Similar research by Saha, Guiton, Wimmers and Wilkerson[85] examined students' self-reported cultural competence and preparedness to care for patients from other racial and ethnic backgrounds and found a positive correlation with rates of diversity within the medical student cohort.

Morrison and Grbic[89] explored US students' self-reported perceptions of learning from students from different backgrounds across six measures of diversity: racial/ethnic, level of parental education, college major, age, region of high school, Admissions Test exam score. They found that perceptions of learning from peers strongly linked to racial and ethnic diversity, particularly students from underrepresented ethnicities. The five other dimensions of diversity did not show any correlation with learning from peers. However, it is likely that students are not, or are less, aware of the other measured indicators of diversity, such as level of parental education, when interacting with their peers. Race and ethnicity are often visible compared to the other measures, which heightens students' ability to make connections between interacting with students from different ethnicities and their learning. This may have implications for studying perceptions of diversity in a UK context where WP is concerned with socioeconomic diversity. Although social differences do intersect with ethnicity[62,104] and some findings may therefore be generalisable to the social and cultural context of the UK, little attention has been devoted to exploring whether the desirable outcomes of increased

social diversity are realised in the learning environments. Given the variations in culture, health care systems and the medical education process between the US and the UK, research is needed to determine whether increasing diversity through WP has an impact on learning experiences in UK medical schools[84].

Medical student diversity has also been shown to reduce prejudices and improve communication skills with those from a range of different backgrounds[89,136]. All of these qualities are desired outcomes of medical education[97], and their effective development could produce practitioners who are able to reduce health inequalities in the population[89,134].

Ip criticised claims that increased cohort diversity improves cultural competency in trainee doctors due to a lack of objective evidence based on quantifiable measures[137]. Research on cultural competency often utilises subjective measures like self-report. He proposed that cultural sensitivity can be adequately acquired through training, a view which may be shared by educators who provide such training within UK medical schools. However, research by Lee and Coulehan[138] found no evidence for enhanced cultural sensitivity in White students undertaking a module in ethics and social issues. Lee and Coulehan's findings are limited to a single institution, and may therefore not reflect outcomes of similar modules in other universities. Nevertheless, other research has established that a higher rate of student diversity is positively associated with related competencies that can (arguably) be quantified, including problem-solving skills[139], critical and complex thinking skills[132] and students' capacity to learn from others who are different from themselves[88].

As noted previously, some researchers have suggested that the positive outcomes of increased diversity can only be unleashed through "*high quality*" or "*meaningful*" interactions between students from different backgrounds. However, the types and 'qualities' of student interactions were not measured in their studies[85,88].

3.4 Summary

In this literature review, I examined how WP and other underrepresented students have been variably constructed as deficient and Other, and as competent and valuable contributors within HE and medicine.

Through these discussions, I highlighted the importance of developing our understanding of how SURGs are perceived within their local contexts. I established a gap in research exploring how medical students on gateway programmes are

perceived, and how gateway programme membership could influence interactions between medical students. Although positive outcomes of increasing ethnic diversity in medical schools have been identified, the research is often quantitative and lacking depth, with students responding on Likert scales to predefined questions about the impacts of diversity[88,89]. It is rarely clear *how* students from underrepresented backgrounds influence students' experiences during medical schools, or vice versa.

Chapter 4 General Methodology

In this chapter, I introduce the methodology used to explore the thesis' overarching question:

How is increasing diversity through WP understood and experienced in two UK medical schools?

The methodological foundations of this research discussed in this chapter include:

- The qualitative approach
- Guiding philosophical principles
- Ensuring quality in qualitative research
- Study design
- Ethical considerations central to all data collection and analyses.

Specific methodological features such as data type, collection and analysis for each of the three research questions (see pages 7 and 8) are presented in the relevant, subsequent chapters.

4.1 The Qualitative Approach

Qualitative research is undertaken to develop our understanding of complex human experiences, the social world, and the meanings that are attributed to situations and social processes[140]. Through it, researchers seek to capture, describe, interpret and present these phenomena in a meaningful way. I draw on a qualitative research approach for this study, to enhance our understanding of how WP is perceived within the social and academic contexts of two UK medical schools, and to investigate some of the possible influences on those perceptions. In keeping with qualitative traditions, the data collected and explored throughout this research are non-numerical[140,141], using written texts and transcribed audio recordings of interviews. I have written in the first person (where appropriate) to reflect my active involvement in the processes of making methodological decisions, carrying out research activities, and in the co-creation of meaning[141,142].

4.2 Guiding Philosophical Principles

4.2.1 Ontology

Ontology refers to beliefs about what constitutes reality. There are two ontological positions: realism and relativism. A realist believes that an external, objective version of reality exists, which can be *discovered* and then reported using the correct methodological tools[141]. Ontological relativism, or idealism, takes a more subjective view, in which there are multiple versions of reality that are socially *constructed* by human perceptions and interpretations[141]. I draw on a relativist understanding of ontology in this research. My roles as a researcher are to co-construct (not simply report) knowledge, to foreground and magnify selected aspects of the data that are relevant to my research questions, and to present a meaningful narrative of participants' accounts[143].

4.2.2 Epistemology

Epistemology is concerned with what knowledge is, and how it can come to be known, as well as the relationship between the researcher and the researched[141].

The two main epistemological positions are objectivism (epistemological realism) and subjectivism (epistemological relativism). Objectivism suggests that we can produce truthful knowledge about the world by measuring it in a neutral or controlled way. While this is widely recognised as true for research in the natural sciences, it is less common within social science research. Most social researchers believe that social phenomena are impossible to control; the social world is messy and complicated, and factors influencing social phenomena can't simply be isolated and quantified.

A subjective epistemological perspective recognises that all production of knowledge is mediated by humans; knowledge is 'created' rather than discovered. What we can 'know' is filtered through the lenses of our previous knowledge and experiences. 'Knowledge' is therefore historically, linguistically, and socially situated.

Researchers and their participants ***co***-create knowledge in the process of research[144]. The researcher seeks participants' views, or versions of reality, and transforms these views through the interpretive process of analysis, actively creating new meanings. The researcher's personal views, experiences and assumptions influence their interpretations of their participants' accounts throughout the process[140]. To ensure that the findings are meaningful and provide a fair and credible reflection of their participants' realities, researchers must take steps to ensure that the process is

rigorous and that findings are representative of the participants' views, not merely the views of the researcher[145,146]. The steps I have taken to meet these aims are detailed in section 4.3 below.

Due to their interrelationship, ontological and epistemological positions are commonly 'clustered' together, to create sets of shared beliefs about the world known as paradigms, which guide the researcher and the research process[141,144].

4.2.3 Qualitative research paradigms

By combining the two ontologies and two epistemologies, three (basic) paradigms are possible: positivism, critical realism and constructivism (it would be impossible to produce objective knowledge about things that only exist subjectively through social construction[147]). These are presented in figure 4 below.

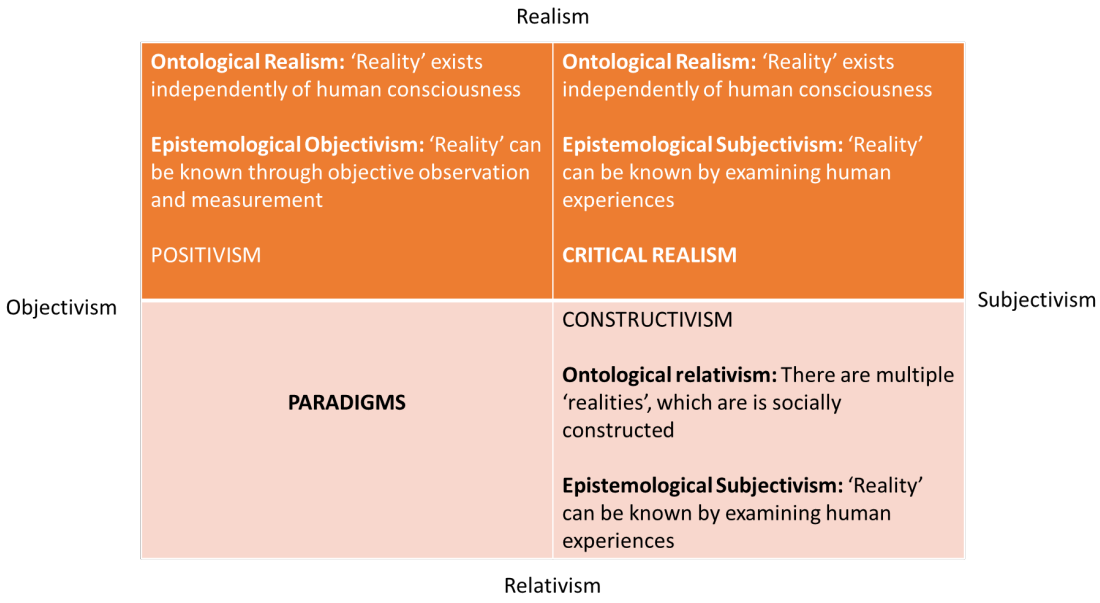


Figure 4: The three basic qualitative paradigms

Positivism is rarely used to examine social phenomena: its emphasis on capturing objective, neutral and value-free truths that exist independently of human consciousness has been widely criticised. Bhaskar suggests that a positivist perspective on the social world entails an "*ontic fallacy*": we cannot just look at the social world and know about it. The social world is not reducible to the sum of its parts; rather, it is messy and complicated, with factors intersecting and layering to create a

wide range of outcomes. Simply observing phenomena cannot reveal those depths and nuances.

Critical Realism combines a realist ontology with a subjectivist epistemology. Ontologically, it suggests that an external social reality exists, irrespective of our acknowledgement or interpretation[148]. Rather than being guided by infallible universal laws as suggested by positivism, critical realism purports that social reality is socially, linguistically and historically constructed when social beliefs are established as a norm, reproduced, and become reified into social structures. These structures are real because they have tangible impacts on the beliefs and behaviours of individuals and groups[147]. However, the structures of reality are rarely self-evident or directly observable[148]. Only by subjectively examining the impacts of social structures (i.e., human behaviours), and viewing them through the lenses of historical and social discourse, can we develop knowledge about them.

Critical Realism research is guided by several assumptions that are salient to this research: its emphasis on contexts, its focus on the interplay between agency and structure in guiding human thought and behaviour, examining the historical, political and social conditions which have 'produced' powerful discourses. However, Critical Realism ultimately seeks to make judgements about which theories of reality are 'best', or more likely to represent the singular 'truth'.

Constructivism (or interpretivism) is an epistemologically subjective paradigm, arguing that social phenomena cannot be researched or understood in the objective, measurable way in which we investigate features of the natural world. Constructivists are ontologically relativist; they posit that there are multiple realities, which only exist in human consciousness and must be constructed and negotiated (not 'discovered', as within more objective paradigms) through examining discourses and lived experiences[149]. Knowledge of the social world thus comes to exist through the social, cultural and political meanings attached to phenomena by individuals and groups. Reality is a construct of human interpretation and requires further interpretation to be understood.

Constructivism has also been criticised by Bhaskar for committing an "*epistemic fallacy*", reducing the world to our experience of it. According to Bhaskar, constructivists assume the world is not real because they are sceptical of our ability to produce knowledge about it[147]. Gorski further argues that a constructivist paradigm can constrain what can be achieved by research: its focus is on making the social world

comprehensible by simply reconstructing experiences, which may not explain *how* and *why* phenomena occur[147,148]. However, this critique could be partially mitigated through a research design such as case study, which requires exploration of context to propose explanations for the social phenomenon under study[150].

This research was conceived as an exploratory study, underpinned by a belief that individual experience of reality is socially constructed, complex and diverse. I undertook this research with an openness to a plurality of possible understandings and experiences of WP in medical schools, and the influences that shape how these experiences are perceived. I therefore used a constructivist case study, including a range of qualitative data collection and analysis methods, which permitted a structural- and context-sensitive examination of student experiences.

4.3 Ensuring quality in qualitative research

Qualitative research into social phenomena is assessed for its quality, trustworthiness and rigour by ensuring 'transparency' throughout the stages of study, meaning that readers can understand how and why particular choices, decisions and interpretations were made. Reflexivity and discussion of positionality are commonly used to aid transparency, where researchers document their values and experiences which may influence the research process[145,146]. Four key criteria are also commonly recommended, described by Savin-Baden and Howell-Major as the 'gold standard'[141], through which qualitative research can be evaluated: credibility, transferability, dependability and confirmability[141,145,151].

4.3.1 Reflexivity

Reflexivity is an introspective process which facilitates understanding of how personal values, experiences and interpretations influence the research process, and how researchers interact with their data[149,152]. Many qualitative researchers keep a 'reflexive journal' in which they document their thoughts and feelings around these issues throughout the research process. Presenting (some of) these reflections can be informative for the reader, facilitating an understanding of the researcher's role in the research process and how decisions and interpretations have been made[145,152].

There are two main types of reflexivity: epistemological and personal[91]. The above section on ontology includes my own reflections on how my belief system has influenced my research design and the implications for my findings (epistemological reflexivity). A positionality statement (following guidelines offered by Savin-Baden and Howell-Major) is included in Appendix A (pPositionality statement279)[161]. It discusses my personal understanding and experiences of the research topic, and my position in relation to those of participants. I have considered how these may affect my role in the research, and possible effects on data collection interpretation. In the next section, I outline the steps I have taken to acknowledge and minimise possible biases.

Braun and Clarke recommend 'weaving' reflexivity throughout the research report to minimise the risk of undertaking superficial reflexivity and to aid the researcher in ensuring that each stage of the process is undertaken thoughtfully[140]. I have included reflexivity in my methods section by being transparent about the choices I made and, when appropriate, why suitable alternatives were not selected. I have also included some extracts from my reflexive journal in appendices (e.g., an excerpt from my reflective journal in Appendix B, p282), and in my findings and discussion sections. Including reflections throughout the report ensures that my thoughts, feelings and opinions are visible to the reader, and acknowledged as an inseparable part of the research process[153].

4.3.2 Credibility, dependability, confirmability and transferability

Credibility refers to the confidence that can be placed in the research findings[145]. The findings and discussion should offer fair and accurate descriptions and interpretations of the participants' views[141]. Some level of credibility can be established through engagement with reflexivity, and it can be further improved through additional techniques, such as peer-debriefing and discussion of findings with other professionals, particularly those with a personal or professional involvement in the field being studied; member checking[141,145]; and triangulation[141,145,151]. I have regularly undertaken peer-debriefing with my supervision team and with a qualitative research group. I have also included triangulation of methods and sources, exploring the research question by using different methodological tools, and collecting data from different participant groups.

Dependability and confirmability both rest on the researcher's transparency throughout the research process. To achieve this, I have: explicitly documented the research context[141], provided a positionality statement and included reflexivity in this thesis[145]. I have also utilised 'stepwise replication'[145]; my supervisors and I have individually coded data, then compared our responses, challenging interpretations and jointly addressing inconsistencies.

Transferability has been described as "*the interpretive version of generalisability*"[145 (p277)]. In theory, if qualitative research utilises purposeful sampling and contains sufficient "thick description" of context, other researchers may be able to replicate the study elsewhere, and the findings may be applicable to other, similar contexts[141,145]. While transferability is not an objective of this research, the research contexts are purposefully selected (see a discussion of 'case study: subject' below), and I have provided rich descriptions of the research contexts and data collection processes that would theoretically make 'transferability' possible. However, the main emphasis within this study is to facilitate an in-depth understanding of the particular contexts at the heart of this research, as is appropriate for case study research.

4.4 Study design: Case Study

This study adopts a case study approach to conducting research. Case study designs acknowledge that social phenomena are always affected by context; understanding of the context is developed and then integrated in the analysis and interpretations of the studied phenomenon.

During my initial planning and discussions with staff at the two institutions, I learned about the different ways that the two medical schools ran their gateway to medicine programmes, and the differences in student demographics. The fact these differences came to light so organically highlighted that sensitivity to the institutional differences would form an important aspect of my analysis. Exploring the impact of gateway programmes is a relatively novel research area, and a case study approach offered an opportunity to delve into experiences and outcomes in great depth and from multiple perspectives while remaining sensitive to the individual contexts.

4.4.1 Case study design

Case studies represent a separation from traditional approaches to research, historically dominated by quantitative methodologies and which favoured objectivity,

isolation and control of variables, seeking to find reliable and generalisable 'truths' that could be applied to a broad population. Case study research rejects such a reductionist approach, placing "*case, not variables, centre stage*"[154]. The main aim of case study research is to present a complete and holistic picture of the phenomena that the researcher endeavours to understand, based on an understanding that social phenomena are complex, messy and indivisible from their varied and "*important circumstances*"[155]. Findings cannot, therefore, be generalised, but instead provide a rich and detailed picture of the specific case(s). Simons[156] defines a case study as an "*in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, institution, programme or system in a 'real life' context*"(p21).

The focus of this research is to increase understanding of how *increasing diversity through Widening Participation is understood and experienced* in two UK medical schools, the UoS and UoA, which adopt different approaches to increasing diversity through their WP gateway to medicine programmes. I discuss the reasons for choosing these two cases below (The cases (subjects).

Comparative case study designs, and deep exploration of context, are underutilised in WP and in medical education[2,157]. Bates and Ellaway suggest that: *"Like dark matter, the contexts for medical education are largely invisible to those within them, although context can have profound influences on teaching, learning and practice."*[157] (p807). Presenting and accounting for the social, cultural political contexts in which diversity and WP are understood and experienced in the two medical schools is a key strength of this study, enriching the analysis and interpretation of findings and permitting more robust comparisons.

In Figure 5, I have illustrated an overall case study design that I have used. Yin provides a series of basic visual models to clarify different types of case study design[158] (presented in Appendix C, p284). Here, I have adapted Yin's basic model of a multiple 'embedded' case study, to incorporate linguistic and design choices employed by Thomas (who uses the term 'nested' rather than 'embedded'[150]). In Figure 6, I present my own case study design as a model:

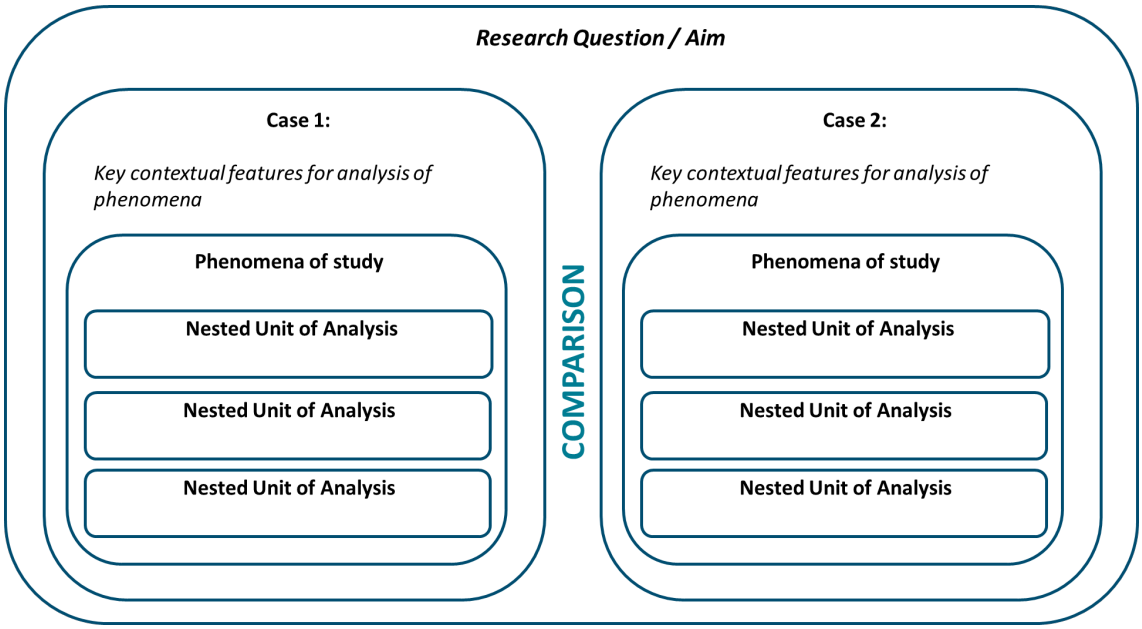


Figure 5: Case study design model, adapted from Yin (2018)

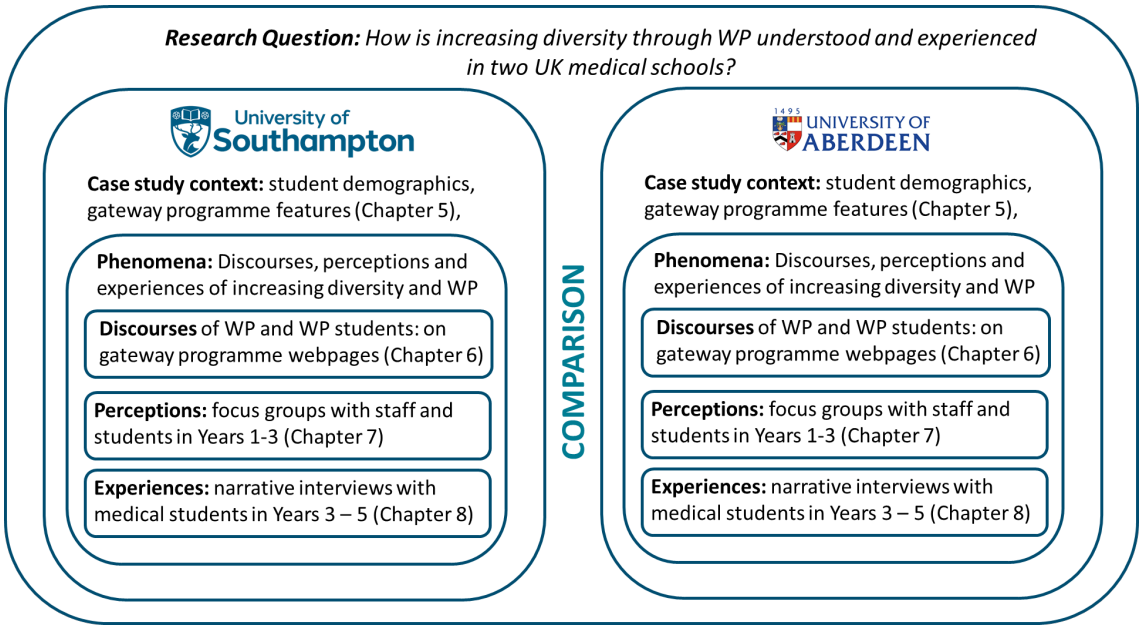


Figure 6: Model of my case study design

4.4.2 Development of the case study

Thomas provides a useful framework of options to guide the development of a case study[150]. Table 1 below presents some of the choices that are available. The use of bold font denotes the design choices relevant to this research, discussed in detail below.

Subject	***Purpose***	***Approach***	***Process***
Outlier	*Intrinsic*	*Testing a theory*	*Single*
Key	***Instrumental***	***Building a theory***	***Multiple***
Local	*Evaluative*	*Drawing a picture*	
	Explanatory	*Descriptive*	
	Exploratory	***Interpretative***	

Table 1: An overview of case study design, recommended by Thomas[149]

4.4.3 The cases (subjects)

Case studies are, by their definition, bounded by their case; they explore a phenomenon within a defined context, or multiple defined contexts. Stake describes case studies as holistic, in that the phenomena and its context cannot be separated[155]. The medical schools at the UoS and the UoA are the cases in this study. The perspectives and experiences of medical school staff and students and the experiences of interacting with diverse students represent the *object* (or purpose) of the study.

Case(s) must be selected for a specific purpose. The subject(s) might be a key case, serving as a particularly good example of something; an 'outlier' case, which is unique, or significantly different in some aspects from otherwise similar contexts; or it may be a 'local knowledge' case, where personal knowledge and connections are likely to result in unusually high levels of access to particular data or phenomena.

The UoS and UoA medical schools both serve as key cases, good examples of medical schools which deliver a gateway to medicine programme. These two particular medical schools were chosen for comparison for several reasons. Firstly, the gateway programmes reflect the two current gateway programmes structures: most English gateway programmes, including BM6, are continuous, 6-year programmes; most Scottish gateway programmes, including G2M, include a single year of G2M study. If they wish to pursue a medical degree, G2M graduates must make a normal UCAS application, with faculty support, to obtain a place on the standard-entry, five-year

programme. The different structures have implications for the perceived purpose of gateway programmes (and thus beliefs about WP) and for how gateway students' experiences may differ in Years 1-5 of medical school.

Secondly, the different target and actual gateway student demographics might contribute to different perceptions and experiences of WP (discussed in Chapter 5), which might influence how WP is perceived and how students interact. So, while the two gateway programmes are marketed as a similar opportunity, both aiming to support SURGs to access and transition into medical school, the gateway students will have different experiences, and diversity, WP and SURGs may be perceived and understood differently. It was considered that the establishment and success of the BM6 programme, which has run for 20 years and produced 14 cohorts of graduates, could affect perceptions of WP compared to the novel and 'unproven' G2M programme, which was established in 2017 and therefore no cohorts have yet graduated.

Finally, there was an opportunistic element. This study was initially conceived by my supervisory team; two were involved in the gateway programmes at their respective institutions (Sally at the UoS and Jen at the UoA). Both provided me with information about the local contexts and had a network of connections who could support my data collection. However, Jen left the UoA in the first year of my candidature (I have included a reflection on the impact of this in appendix D, 285), but as my initial comparisons between the two institutions were both interesting and fruitful, we continued with the multiple case study design.

Thomas recommends undertaking a "*searching analysis of the **cultures** of the environments being studied*"[150 (p172).] I examined the local contexts of the two institutions, student demographic data and outlined differences between the gateway programmes, presented in chapter 5. I then conducted a Critical Discourse Analysis (CDA) of how language is used to construct WP on the universities' gateway programme webpages, presented in Chapter 6.

4.4.4 The purpose: phenomena/object of the study

The purpose of the study sets out the reasons for conducting a case study. This is an instrumental case study; the case study serves as an 'instrument' or a tool to answer a broader question, and the phenomena are of primary interest.

Case studies are considered "*powerful engines of potential explanations*"[150 (p123)] for developing understanding of particular phenomena in very specific circumstances. Merriam describes case study research as 'heuristic', in that they illuminate the researcher's understanding of the phenomenon; one out of many possible interpretations[159].

4.4.5 Data collection and analyses

Multiple methods for data collection and analyses are used in case study research to facilitate a rich and detailed picture of the case, and thus enable researchers to develop layered and highly nuanced understanding of the phenomena they are exploring[150]. I describe the data collection and analysis methods for each research strand in the relevant chapter.

4.5 Ethical considerations

Thoughtful and ethically robust research places participants at the fore of each stage of the research process. Participants are valuable partners in the research process, not objects from whom data can be extracted[150,152]. Foundational ethical principles for this study are introduced below, and discussed more comprehensively in the ethics application forms, participant information sheets and consent forms (located in the appendices of relevant chapters). Ethical considerations relevant to the use of specific methods of data collection and analysis are discussed within the relevant chapters.

4.5.1 Informed consent

Ethical research processes should respect the autonomy and well-being of their participants. Participation should always be an on-going, active and well-informed choice[141], based on awareness of what is involved in participation, and potential risks of harm (including psychological), as well as possible benefits of participating. Participants should have opportunities to ask questions, and where possible be able to request that their data are withdrawn without any concerns about repercussion[91]. A good understanding of these considerations should be confirmed by the researcher before collecting data.

Researchers should be sensitive to the power relationships that may be present in interactions between the researcher and participants, and the potential implications for acquiring fully informed consent. As I am a student, I considered there to be a low risk of creating an uneven power dynamic between myself and my student and faculty staff participants. However, members of my supervision team are professionally involved with my potential participants as teachers and colleagues. I made these possible relationships explicit to all potential participants during recruitment stage and sought to mitigate their potential impact through highlighting my commitments protecting participants' identities.

4.5.2 Anonymity and confidentiality

Participants should have confidence that the researcher will take measures to conceal their identification at all stages of the research process, including the secure storage and handling of data and the dissemination of findings. However, it is important that researchers do not offer a guarantee of anonymity or confidentiality; the degree to which it is possible should be made explicit to participants before data collection begins[91].

Thomas raises the particular difficulties associated with guaranteeing anonymity in case study research, where detailed, 'thick' descriptions of context are necessary, increasing the potential risk of institution and participant identification[150,159]. This issue was also affected by the methods used in each research strand, particularly when presenting narrative data. I discuss these considerations in the relevant chapters.

4.5.3 Interpretation

Qualitative data does not speak for itself; it requires interpretation to be meaningful, and the possible meanings of data are limited by the research question[143]. When we give something meaning, we are picking one of many potential meanings by foregrounding aspects of the data, and thus shape the potential knowledge that can be generated. Researchers should not claim that their interpretation is the only one possible.

When researchers attempt to understand something, they transform it, and thus assume a degree of power over participants. They may be either attempting to 'give voice' to their (presumably previously unheard) views and presenting them to a wider community, or taking the role of an 'expert', using superior theoretical knowledge to

uncover the ‘truth’ about what is really going on, which has the potential to disempower participants. I sought openness and opportunities to have my ideas and interpretations challenged during my research journey by reflecting on my interpretations both individually and by seeking feedback from other researchers.

4.6 Summary

In this chapter, I outlined the qualitative, case study approach used in this research, and described measures taken to ensure that that this research will be trustworthy and ethical. I introduced the case study research design.

I discuss the methodological choices and strategies specific to each of the research strands in the relevant chapters.

Chapter 5 An exploration of the two cases: the UoS and UoA medical schools

In this chapter, I aim to build a picture of the two cases: the UoS and UoA medical schools. For each institution, I introduce the national and local context, present student demographics and describe structural and curricula features of the gateway programmes.

The Literature Review established factors which may influence perceptions of WP and diversity in medical schools, including:

- Contextual factors such as the demographic of the medical student cohorts[85]
- How WP is presented through publicly available discourses[72,160] (such as institutional webpages and Access and Participation plans[A3])
- Personal experiences of interacting with WP and diverse students[33,88].

Previous research has considered these factors separately, offering a reductive understanding of how WP and diversity are perceived, and what influences those perceptions. This case study employs a holistic approach, exploring how multiple factors may shape perceptions within the contexts of the UoS and UoA medical schools.

The information identified in this chapter is later used to contextualise and inform the analysis of data generated to addressing the three research questions, in the studies presented in chapters 6, 7 and 8.

5.1 Sources of information

Details about the national contexts, the institutions and the gateway programmes were collected from university webpages and from discussions with key staff involved in the delivery of the programmes at each university. I confirmed the accuracy of information with university staff members and included additional information suggested by them.

[A3] Access and participation plans are regulatory requirements which set out how HE providers in England will improve equality of opportunity for underrepresented groups to access, succeed in and progress from higher education.

Demographic data of medical students are collected for students in all UK medical schools and stored in the UKMED medical education data base. For this study, demographic data for the cohorts at the UoS and the UoA from the most recent 5-year period, from 2013-2017 were extracted and are included here. I used a 5-year sample as I felt this might be a timeframe in which observations and perspectives about WP could be established by medical school staff and students, and a timeframe over which the institutional values and ethos about WP could be developed. Data were collected and are presented at programme level for students at the UoS, including students on the BM5, BM4 and BM6 programmes, as this may influence perceptions of WP at the UoS. As the G2M programme began in 2018, the data from the UoA do not reflect the inclusion of students on the Gateway2Medicine programme.

The available demographic categories include: ethnicity, gender, socio-economic classification, the index of multiple deprivation, POLAR, parental education, and school type attended. These categories are explained in appendix E (p287). As some of the demographic data pertain to small groups of students (e.g. a maximum of 35 students on the BM6 programme each year), some of the data has been suppressed by UKMED. I reflect on the limitations of the current dataset in the Discussion (p89).

5.2 General context

Throughout the course of this research, the world was shaken by the Covid-19 pandemic. The focus groups discussed in this study were conducted from March 2019 to February 2020, so the experiences discussed by students were largely unaffected by the drastic changes that ensued.

However, from March 2020, the UK was plunged into a national ‘lockdown’, with severe restrictions imposed on movement and socialising. The social and academic experiences of all students were disrupted, and many medical students were delayed in progressing to their next stage of training[161]. Pedagogic practices changed overnight, with shifts to online and often asynchronous forms of teaching, learning and assessment, restricted access to university facilities and variable internet access at home. Exams, electives and placements were postponed or restricted, and many medical students volunteered to support the NHS by working on the front lines[162], putting them at higher risk of exposure to the virus and causing additional strains on their physiological and mental wellbeing[163].

This research is underpinned by the belief that learning occurs socially and has an explicit focus on examining the impact of interactions between students on their learning experiences. The sudden removal of in-person activities was expected to have a significant impact on participants experiences during medical school, as well as the interview context: implications of conducting interviews online are discussed in the methods section of Chapter 8. The UoS narrative interviews were held in June 2021, but, surprisingly, most UoS participants did not dwell on, or even raise the issue of the global pandemic in our conversations, perhaps reflecting that most participants were in Year 4 or 5 and still able to undertake most placements. The UoA narratives were conducted in November to December 2021, and three of the four participants were in Year 3, for whom the lockdowns had greatly disrupted both their academic and clinical experiences. This was discussed in the interviews and considered my interpretations.

I have reflected on the impact of Covid 19, and some other personal experiences, on my PhD journey in appendix F (p289).

5.3 The University of Southampton

5.3.1 National and local context

The UoS is a Russell Group institution[4] on the South coast of England; the largest HE institution in the South East with 22,665 students. It is ranked as the 16th and 17th UK university according to The Sunday Times and The Guardian university guides, respectively.

The UoS medical school currently trains over 1400 students and is centred in Southampton General Hospital. Due to the volume of students, the Student Union have a separate branch to the main university Student Union called MedSoc, through which medical student committee members run events, activities and societies exclusively for medical students.

The UoS medical school runs several medical degree programmes, including:

- BM5, a traditional entry 5-year programme

[A4] Russel Group Institutions are a self-selected association of twenty-four public research universities in the United Kingdom with a shared focus on research and a reputation for academic achievement.

- BM6, a 6-year gateway programme for students from underrepresented groups
- BM4, a 4-year programme for graduates
- BM(EU), a 5-year collaborative programme with Kassel School of Medicine in Germany for students bi-lingual in German and English
- BM(IT), an international transfer programme with students from universities in Malaysia and Brunei[164].

The UoS have a range of WP policies and practices in place, which are underpinned by their Access and Participation Plan. The UoS Access and Participation plan is a complicated document, with different ways of expressing data for different groups; for example, targets for reducing participation gaps for POLAR4 Q1 students are expressed as ratios, while participation gaps between IMD Q1 and Q5 students are expressed as percentages. The primary aims for the wider institution include:

- Reduce participation, continuation and attainment gaps for students in POLAR4 Q1 and IMD Q1
- Reduce or eliminate the continuation and attainment gaps for ethnically diverse students
- Increase the volume of mature learners and learners from a care background

The UoS medical school has a contextual admissions policy for the BM5 programme, to make offers of a place on to students from underrepresented groups based on lower academic grades. The medical school run several initiatives to widen access to medicine for Year 12 students from underrepresented groups, including Taster Courses and Virtual Work Experiences and a 3-day Residential. The medical students have created have a student society called WaMsoc (Widening access to Medicine in Southampton), developed and delivered exclusively by medical students, who provide information and guidance in schools, support on-campus Medicine ‘taster’ days and run an e-mentoring programme. The UoS gateway to medicine programme, BM6, supports students to both access medicine and to progress through the degree.

5.3.2 BM6: The UoS gateway to medicine programme

BM6 was established in 2002 and 15 cohorts have successfully graduated, although at a lower rate than BM5 students (85% and 95% respectively[80]). It has entry requirement of grades BBB at A-Level, instead of AAA as seen for entry on the BM5 programme[165]. It typically attracts students from socially and educationally disadvantaged areas.

There are 32 places on the BM6 programme, which starts with Year 0 consisting of science and professionalism modules, taught by staff whose primary responsibilities are with the BM6 programme, as well as observational healthcare placements. Year 0 is undertaken on the main university campus. The aim of Year 0 is to prepare students for the transition to and integration in medicine, and to provide academic and pastoral support. Students who successfully pass Year 0 exams automatically progress to Year 1, and study alongside their peers on BM5, for the remaining five years of training. On average, 96% of the BM6 cohort have progressed to Year 1 in the last 10 years. In Years 1-5, BM6 students are academically integrated with the other cohorts, but remain formally recognised and registered on the BM6 programme.

BM6-specific support is available to BM6 students throughout their 6-year degree, including a bursary and workshops to enhance self-efficacy and ease transition to the clinical years (i.e., when they start placements in year 3)[166], as well as access to regular student services. During the workshops, students meet former BM6 students who have matriculated into the profession who share their experiences of medical school and serve as relatable role models[166].

5.3.3 Demographic data for the UoS medical school

The following table presents demographic data for students enrolled at the UoS medical school from 2013-2017.

Demographic factor	***Category***	**BM5**	**BM4**	**BM6**	**All progs**
Gender	*Male*	47%	46%	50%	47%
	Female	53%	54%	50%	53%
Ethnicity	*White*	64%	79%	22%	62%
	Asian	17%	8%	30%	17%
	Black	3%	0%	22%	4%
	Mixed	4%	8%	7%	5%
	Other	1%	0%	0%	1%
	Not recorded	11%	5%	19%	11%
IMD	*1 - Most deprived*	5%	8%	47%	11%
	2	8%	15%	33%	12%
	3	15%	20%	13%	16%
	4	19%	20%	3%	17%

	5 - Least deprived	43%	38%	3%	36%
	Not recorded	10%	0%	0%	7%
Parental education	*Yes*	75%	63%	13%	65%
	No	18%	28%	77%	27%
	Not recorded	7%	10%	10%	8%
POLAR	*1 - Lowest rate of participation*	4%	5%	14%	5%
	2	8%	13%	10%	9%
	3	11%	15%	28%	14%
	4	23%	23%	28%	24%
	5 - Highest rate of participation	44%	44%	21%	41%
	Not recorded	10%	0%	0%	7%
School type	*Private funded school*	24%	0%	6%	17%
	State funded school	66%	90%	87%	73%
	Not recorded	10%	10%	6%	9%
SEC	*managerial and professional occupations*	65%	53%	12%	57%
	intermediate occupations	11%	16%	12%	12%
	small employers and own account workers	4%	0%	23%	5%
	lower supervisory and technical occupations	1%	0%	0%	0%
	semi-routine and routine occupations	8%	13%	38%	12%
	Not recorded	13%	18%	15%	14%

Table 2: Demographic data for students enrolled at the UoS medical school from 2013-2017

I have highlighted some notable features of the UoS cohort in the following bullet points:

- **Gender:** There were only small differences between programmes and in the overall cohort in terms of student gender

- **Ethnicity:** Most students on the BM5 and BM4 programmes are white, while only 22% of BM6 students in this period identified as white. Black students make up 3% and 0% of the BM5 and BM4 cohorts respectively but represent nearly a quarter of the BM6 student population.
- **IMD:** Nearly 50% of BM6 students in this time period are from the most deprived regions in England. Only 5% of students on the BM5 programme hail from highly deprived areas.
- **Parental Education:** The majority of students on the BM5 and the BM4 programmes have parents with experience of HE, while more than three quarters of BM6 students were the first in their family to attend university
- **POLAR:** Nearly half of the students undertaking the BM5 and BM4 programmes come from regions of England where students are *most* likely to progress to university. In contrast, only one-fifth of students on the BM6 programme lived in an area of high university participation.
- **School type:** Nearly a quarter of students on the BM5 programme attended privately funded schools, compared to only 6% of BM6 students.
- **SEC:** Over 50% of students on the BM4 and BM5 programmes have parents whose profession falls into the top two classifications on the SEC marker. Nearly 40% of BM6 students reported that their parents worked in the lowest two categories available in this dataset (semi-routine and routine occupations).

5.4 The University of Aberdeen

5.4.1 National and local context

The UoA is the fifth oldest university in the UK, situated in North-East Scotland, with 15,815 students. It is ranked as the 20th university in the UK in The Guardian and The Sunday Times university guides.

The UoA medical school teaches around 850 students and is housed on a main university campus alongside the Aberdeen Royal Infirmary. Aberdeen offers a five-year MBChB programme, leading to the award of the degrees of Bachelor of Medicine and Bachelor of Surgery, MB ChB. They recently withdrew an institutional partnership with the Sri Lanka Medical Pathway due to Covid-19.

The UoA medical school supports SURGs to enter medical school through several initiatives. WA in Scotland is supported and guided via the Scottish Framework for Fair Access, which was developed to help access practitioners to plan and evaluate new ways of helping people from disadvantaged backgrounds to access HE[167]. At the UoA, applicants to medicine from backgrounds which are currently underrepresented can receive an offer based on reduced academic grades and a 10% uplift on their UCAT score. The Reach Aberdeen programme entails a range of pre-entry activities to provide information, advice and guidance to SURGs. Once enrolled at the UoA, SURGs are eligible to receive a range of scholarships and bursaries. The gateway to medicine programme at the UoA, G2M, provides a route into medicine for SURGs.

5.4.2 G2M: The UoA Gateway to Medicine programme

The Gateway2Medicine programme (G2M) was established in 2017 in response to the Scottish Government's call for initiatives to support underrepresented groups to enter medicine[81]. One consequence of it being a relatively new medical school for this study is a lack of access to data on attainment, continuation and progression, while this data is accessible for previous UoS cohorts.

G2M is run in partnership between the UoA and North East Scotland College. It is a one-year programme and currently recruits up to 25 students from backgrounds of educational and social disadvantage and from rural or remote Scotland. The academic entry requirements are AABB in Scottish Highers, which is lower than the standard medical degree programme requirements of AAAAB[168].

The first half of the G2M year is primarily undertaken at the partner college, where students study science-based modules. Some clinical skills and support sessions are provided at the university. The second half of the year is based at the on-campus medical school, and entails further study in sciences and an introduction to Health Services in the UK. All students are offered paid work experience in healthcare.

Students who successfully complete the 1-year programme are awarded a Certificate in Higher Education in Pre-Medical Studies. To gain a medical degree, students must successfully apply for and complete a direct-entry, five-year medical degree programme through the usual medical degree application route (UCAS), involving a written application and performing satisfactorily at interview. As the programme is relatively new, it is not possible to include progression rates, although the Scottish government reported that 95% of the first cohort students progressed to study medicine[169].

Students receive a bursary and tailored support during the G2M year, including preparation for the application to the medical degree. This includes mock-interviews facilitated by G2M tutors and former G2M students, providing opportunities for current G2M students to network with G2M graduates. Once former G2M students enrol onto the medical degree, they are no longer formally recognised as G2M students. Any support needed is provided by the student services available to all.

5.4.3 Demographic data

The following table presents demographic data for students enrolled at the UoS medical school from 2013-2017.

		Aberdeen
Demographic factor	***Category***	**All students**
Gender	*Male*	43%
	Female	57%
Ethnicity	*White*	63%
	Asian	20%
	Black	1%
	Mixed	4%

	Other	2%
	Not recorded	10%
IMD	*1 - Most deprived*	4%
	2	7%
	3	13%
	4	19%
	5 - Least deprived	37%
	Not recorded	20%
Parental education	*Yes*	64%
	No	14%
	Not recorded	23%
POLAR	*1 - Lowest rate of participation*	3%
	2	4%
	3	10%
	4	17%
	5 - Highest rate of participation	45%
	Not recorded	20%
School type	*Private funded school*	19%
	State funded school	61%
	Not recorded	20%
SEC	*managerial and professional occupations*	64%
	intermediate occupations	12%
	small employers and own account workers	5%
	lower supervisory and technical occupations	2%
	semi-routine and routine occupations	10%
	Not recorded	9%

Table 3: Demographic data for students enrolled at the UoA medical school from 2013-2017

I have highlighted some notable features of the UoA cohort in the following bullet points:

- **Gender:** There is a slightly higher ratio of female students than male at UoA
- **Ethnicity:** Student ethnicities at UoA are similar to those on the BM5 programme at UoS. The majority of students are white, and the second largest group identify as Asian.
- **IMD:** Over half of the students at UoA come from the *least deprived* backgrounds according to this classification, with only 4% of students coming from the *most deprived* communities.
- **Parental Education:** A large proportion of students at UoA have parents who have experienced higher education.
- **POLAR:** Nearly half of the students attending Aberdeen medical school in this time came from areas with the *highest* levels of university participation. Only 7% of UoA students lived in areas falling into quintiles 1 and 2.
- **School type:** Nearly a fifth of UoA medical students had attended private school before going to university.
- **SEC:** three quarters of students had parents in the top two categories for socioeconomic classification

5.5 Key differences between the UoS and UoA medical school gateway programmes

In table 4 below, I highlight differences between the institutions and their gateway to medicine programmes, and consider how these differences may impact perceptions of WP and diversity at the respective medical schools.

Programme feature	**BM6**	**G2M**
Duration of programme	20 years (established 2002)	5 years (established 2017)
Cohorts graduated	15	0
Eligibility criteria (emboldened text denotes different criteria)	**Meet 3 of the following:** • First generation applicant to Higher Education • **Parents, guardian or self in receipt of a means tested benefit** • Young people looked after by a Local Authority • In receipt of 16-19 bursary or similar grant • Resident in an area with a postcode which falls within the lowest 20% of the IMD, or **a member of a travelling family.** • In receipt of free school meals at any time during *Years 10-13*	• Resident in a postcode that falls into lowest 20% of SIMD • Care experienced (currently or previously in care) **OR meet at least 3 of the following:** • **Student of REACH school** • First generation to HE • **Young carer** • Eligible for free school meals at **any time during secondary education** • **Living in a rural/remote area of Scotland** • **Estranged from family** • Eligible for Education Maintenance Award • **Other severe and sustained hardship** • **English as Second Language**

Length of programme	6 integrated years, leading directly to a medical degree. BM6 'Year 0' is taken as a small, separate cohort. Years 1-5 are taken alongside the other cohorts	1 year. The G2M programme is designed to facilitate successful UCAS (the Universities and Colleges Admissions Service, through which all UK university applications are made) application to the traditional-entry 5-year programme
First year structure	BM6 'Year 0': All based at UoS campus. Learning mostly based at Highfield campus, which is separate from the General Hospital. Teaching is split evenly between the university campus and hospital in Years 1-2, and the majority of teaching occurs in the hospital and on placements in Y3-5.	The first half is based off-campus at a local college (NESCOL). The second half of the programme is undertaken in the medical school facilities at the main campus, which is on the same site as the hospital. All students undertake a paid work experience.

Table 4: Key differences between the UoS and UoA gateway programmes

5.5.1 Key differences between the gateway programmes:

- BM6 has been delivered for nearly two decades and 15 graduated cohorts, while G2M is newly established. UoS participants may have a greater understanding and more experiences of successful WP.
- The continued progression of BM6 students through a specialised 6-year programme means that students can be more easily identified as SURGs. Their membership on the programme may impact how they are perceived.
- Successful G2M students may progress to other institutions; this may limit the establishment of friendship groups and aid integration with the traditional-entry students.
- The geographic eligibility criteria of G2M could mean that some G2M students who gain a place based on this criterion have advantages (e.g. socioeconomic and the associated capital) that help them to integrate in the medical school compared to other SURGs[7,8,84,85].
- The Russel Group status of the UoS may impact how WP is presented on the university website[80].

As no previous research has explored perceptions of WP in relation to the impact of gateway programmes, it is difficult to conceive if, or how, structural elements of the gateway programmes may influence perceptions of SURGs within the two UK medical schools. Future research could explore this further by comparing perceptions of SURGs within institutions which house gateway, or other programmes specifically designed for SURGs, compared to institutions which do not house a gateway to medicine programme.

5.5.2 Demographic data discussion

WP policies and practices aim to increase the numbers of underrepresented groups in HE. The demographic characteristics of students in the two medical schools may therefore influence what participants understand about WP. Dominant demographic traits may reveal which groups of students are underrepresented within the institutions, suggesting *who* WP is for. This may have implications for perceptions of both the *purpose* of the WP, and the perceived *impact* of increasing diversity through WP.

Table 3 (gateway programme differences) shows that ethnic and racial background are *not* used as eligibility criteria for either of the gateway programmes. For both the UoS and UoA, socioeconomic status is the main WP marker, while UoS also recruit students who are FiF, and the UoA target students from rural areas in Scotland. However, ethnicity and LSES (the main criteria for WP eligibility) often intersect[62,104], so although a student's ethnicity may not make them eligible for a place on a WP programme, it is unsurprising that there are higher proportions of ethnically diverse students on the BM6 course than in the other programmes. The proportion of B.A.M.E. students on the BM6 course is higher than in the English population (according to the 2011 census[170], see figure 7 below). Students and staff at the UoS may therefore assume that the purpose of WP is to increase the ethnic and racial diversity of the medical student cohort. Unfortunately, equivalent data for G2M were not available, so it is more difficult to draw conclusions about the influence of ethnicity on perceptions of WP in Aberdeen.

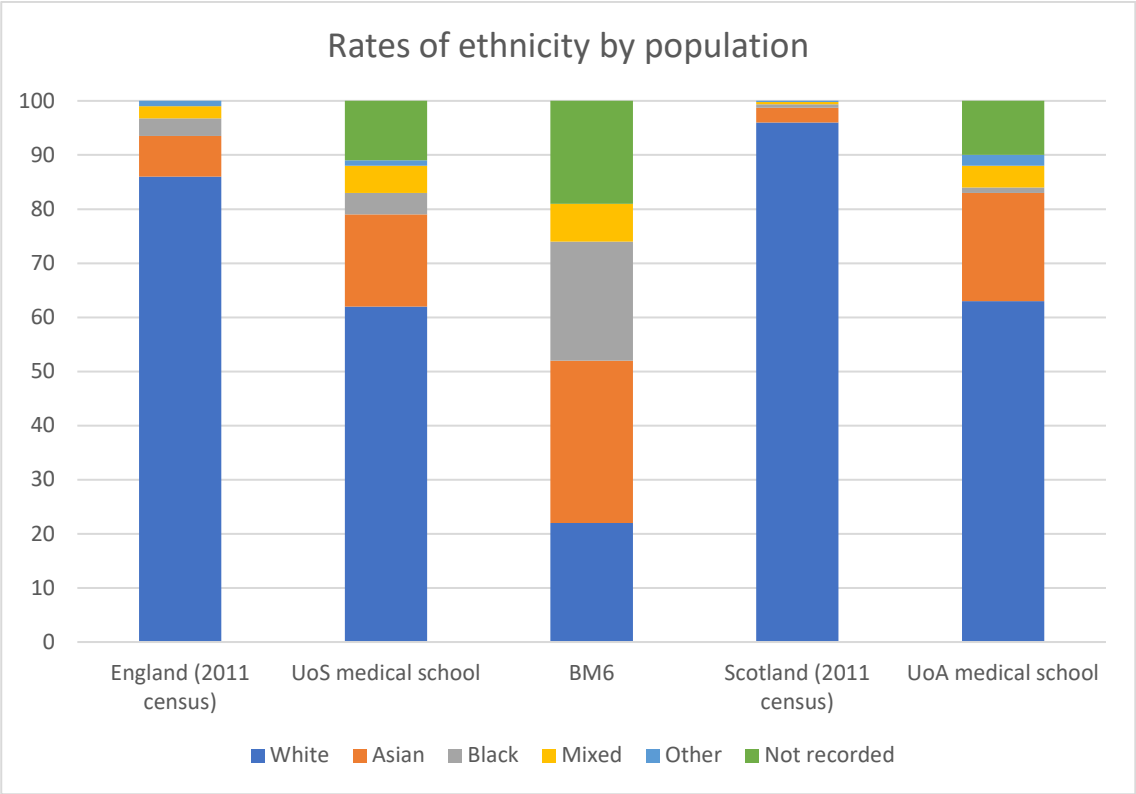


Figure 7: Rates of ethnicity by population (English and Scottish population data taken from the 2011 census[168])

In the full cohorts of both medical schools, and particularly in the BM6 cohort, B.A.M.E. students are overrepresented compared to the general populations of England and Scotland. International findings suggest that medical students from underrepresented ethnicities, for example, Australian indigenous populations in Australian HE, feel better prepared to care for patients from their specific ethnic and cultural backgrounds than their peers[62]. In the US, White students from more ethnically diverse medical schools rated themselves as more highly prepared to care for B.A.M.E. populations than White students from less diverse cohorts[85]. Participants in this research, particularly at the UoS, may therefore perceive that a key purpose of WP is to enhance cultural awareness and sensitivity to patients from different *ethnic* backgrounds, and to improve quality of healthcare for these groups.

The figures for IMD and SEC in table 2 (Table 2: Demographic data for students enrolled at the UoS medical school from 2013-2017) show that students on the BM6 programme are significantly more likely to hail from a socioeconomically deprived background than students on the BM5 and BM4 programmes, as would be expected based on the BM6 entry criteria. The UoA figures (Table 3: Demographic data for students enrolled at the UoA medical school from 2013-2017) show that most medical

school students come to medical school from the least deprived communities (no data were available relating to G2M). The implications of greater socioeconomic deprivation on perceptions of SURGs are likely to be subtle. For example, SURGs from low income families are more likely to need to work part-time to manage the financial burdens of living away from home, and some have additional financial responsibilities to their family and partners[63,171]. Working part-time during university can have implications for students' mental well-being, their capacity to socialise and their ability to dedicate sufficient time to their studies[62,63].

The majority of students on direct-entry programmes at both the UoS and UoA have parents who have experience of HE and live in areas of high university participation. They may therefore benefit from having more realistic expectations of what HE entails and more appropriate forms of social and cultural capital which help them to fit in and belong at university[59,62,63]. Being a first-generation applicant to HE is one of the criteria for both the BM6 and G2M programmes. Some SURGs entering HE onto traditional-entry programmes have described struggling to navigate the unfamiliar territory of university[59,63]. However, the gateway programmes' both include a year of study which give gateway programme students a year of experience of navigating HE before joining their peers on the traditional-entry programmes. This additional year may afford gateway programme students an opportunity to become comfortable in the university environment. Therefore, SURGs on these gateway programmes may be perceived by staff and other students as well established within their medical school contexts, and as having a good understanding and realistic expectations of the degree programme. In the early years of study in particular, they may be perceived as possessing valuable forms of knowledge and social and cultural capital that help them to belong within the institution.

5.6 Limitations

There are many other forms of diversity that are not represented in this dataset, such as disability, religion and sexuality. These characteristics may also inform participants' understanding of diversity and may be discussed in the focus groups and interviews undertaken for research strands 2 and 3. Moreover, aggregating this data undermines the complexities of intersecting identities which inform and shape each individual's experiences and worldviews, and can be a crude way to categorise individuals for the sake of convenience (discussed in 0). This limitation will be considered when using these data to understand and contextualise later findings.

5.7 Conclusion

In this chapter, I presented contextual information about the UoS and UoA medical schools and considered the potential impact of some factors on perceptions of WP and diversity. I demonstrated significant differences in the way that WP is enacted in each medical school through using a gateway programme. The demographic data findings reveal similarities and differences in which groups of students are underrepresented in the two medical schools based on the available data. The context established in this chapter is used to inform the analysis of data in the studies presented in the following chapters.

Chapter 6 A Critical Discourse Analysis of gateway programme webpages

To develop a better understanding of how WP is presented within the UoS and UoA medical school institutions, I examined the institutional beliefs about WP promoted more widely across the two universities on their websites. I was curious about what the institutions claimed about the purpose of WP, who should be included, and how they should be included[172-174].

6.1 Background

Discourses, taken-for-granted ways of thinking about things, are widely recognised as shaping institutional practices in medical schools[72,160,175]. Discourses (or beliefs) about WP, for example, shape institutional policies and practices (such as Access and Participation Plans), which are enacted by members of university staff. WP policies and practices can influence what staff and students think about WP. In turn, the ways in which WP is discussed can shape the culture, or institutional beliefs about WP. Figure 8 below presents this cycle visually.

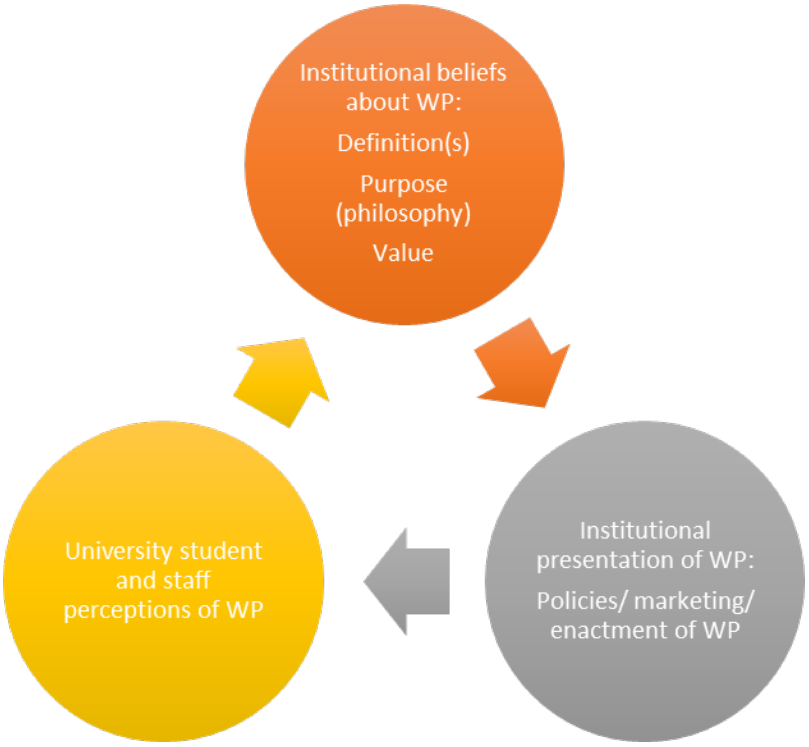


Figure 8: A visual depiction of the interplay between institutional discourse and perceptions of WP

Universities are powerful sources of information for an audience which includes, but extends beyond their own membership, including prospective students, teachers and parents. What, and how, universities communicate with the public about WP and SURGs may have an important and far-reaching influence on how they are perceived. Institutional beliefs about WP are portrayed through discourses in institutional documents such as webpages, prospectuses, and official university policy. Researchers have considered how these discourses might influence perceptions of WP[72,160,173,176-178].

WP is presented differently depending on university type and status[176,177]. In an analysis of university prospectuses, Graham found that more 'selective' institutions have emphasised discourses of academic excellence and positioned themselves as 'prestigious' institutions more than as welcoming to students from all backgrounds[176]. Few institutions promote discourses highlighting well-established educational benefits of diversity, although Further Education colleges typically presented more diversity-positive messages[177]. As university websites and brochures are important sources of information for prospective applicants, previous research has focused on the potential impact of messages sent to applicants[72,160,176], such as their implications about who is suitable for HE.

Drawing on a Foucauldian critical discourse analysis of text on UK medical school websites about WP, Alexander and colleagues argued that discourses of academic excellence in medical student selection were dominant over social accountability discourses[72]. For 23 out of 25 institutions, meritocratic language such as '*identifying the best possible applicants regardless of their personal circumstances or background*' (p604) was used to express the main purpose of WP activity. SURGs were depicted as requiring and receiving support from the university, and thus presented as deficient compared to peers who access medicine via traditional routes and are offered less support. Two university websites communicated the benefits to society of equal representation in medicine, but educational rewards of diversity such as better understanding of diverse populations were not promoted on any webpages. This suggests that medical schools view WP as a mechanism to ensure 'fairness' in selection rather than inherently adding value to the medical school.

Similarly, discourses of academic excellence permeated descriptions of suitable medical student candidates on Canadian medical school webpages[160]. The webpages implied that the best candidates would contribute positively to the academy. WP medical students, who often enter with lower grades and have other commitments such

as paid work or caring responsibilities[63,179,180] which reduce their ability to contribute to the academy, were implicitly framed as less valuable or less deserving of their place. Desirable personal qualities recognised as important for medical school selection (like 'altruism') were often exemplified by opportunities like volunteering, which are more accessible to students without responsibilities outside of their education. Because of these selection criteria, most successful applicants to medicine will have similar experiences, along with the implicit symbolic and economic capital that they carry. SURGs without these shared experiences and forms of capital may be perceived as different.

Cleland and colleagues found that Medical School Admissions Deans do recognise the value of diversity and are aware of the "*shaky ground of privilege upon which the cherished notion of meritocracy rests*"[181] (p43). However, their desire to nonetheless uphold and preserve the meritocratic discourse of academic excellence has caused selection committees an "*unresolved discursive tension*", leading to inaction. Institutional responsibility to adapt and create an environment in which the changing demographic of students can all flourish and thrive is circumvented by this powerful meritocratic discourse; diversity is seen a problem to be accommodated within existing conceptualisations of excellent and merit[182]. Non-academic qualities associated with providing excellent healthcare (such as relatability to a diverse group of patients) can be less valued, and students who exemplify these attributes but enter with lower grades may therefore be perceived as different or less deserving of their medical school place, despite competing fairly for it. Duenas notes that more 'traditional' medical students who have undoubtedly worked hard and made sacrifices and choices to earn their place may feel that students who enter via a WP route may have accessed the profession unfairly[71].

As a part of exploring diversity through discourses, perceptions and experiences of widening participation in two UK medical schools, understanding how institutional discourses can shape perceptions of WP and SURGs prompted me to explore the discourses about WP and suitability to study medicine on the UoS and UoA medical school webpages about their gateway programmes. Other researchers have evaluated the potential impact of these discourses on *prospective* students[72,160,177,181]. I evaluated the potential impact on institutional messages about WP and SURGs on the perceptions of *current* students and staff in the medical schools.

In this study, I address my first research question:

1. *How are widening participation and students from underrepresented groups presented on the gateway programme webpages?*

The aim was to build my understanding of the two cases. In keeping with the Case Study research design, I later draw on these insights to enhance my understanding of participants' perceptions of WP and diversity in medicine.

6.2 Methods

6.2.1 Text selection

Texts about the UoS and UoA gateway programmes from the Medical School pages (MSP) and the Undergraduate Course pages (UCP) were used as data in this study. Webpages produced by medical school staff are more likely to reflect the values and aims of the medical schools[72], while UCP are often written by marketing staff and may therefore reflect different purposes and broader institutional aims[72,160]. UCP are clearly targeted at prospective students, and are widely accessed by them[183]. Research shows that prospective students are most likely to access webpages when seeking information about potential universities and courses than alternative sources such as prospectuses[183]; for some time-poor students, they may be the *only* source of information they seek when making applications[111]. They are likely to be accessed by university staff as well as prospective students[160].

The data were collected in June 2020 by extracting all the available text from each of the four webpages into word documents. Only written text was included in the dataset.

6.2.2 Data analysis

Universities have multiple goals when constructing promotional materials like course pages, so the value of WP is unlikely to be described explicitly. I therefore sought a linguistic approach to analysing text that would enable me to examine what is communicated *implicitly* within the texts, and how linguistic and structural features of the pages construct impressions of WP. Discourse Analysis is one analytical approach used to explore implicit messages in texts.

Critical Discourse Analysis (CDA) is a form of Discourse Analysis which is often undertaken to examine issues of social inequality and the (re)production of societal power relations through text[93]. CDA researchers examine patterns of discourses present in the structural and linguistic features of the text. Linguistic choices and positioning give power to some groups of people at the expense of others. CDA is used to explore the possible *consequences* of these power dynamics: how they can influence how readers think and feel about the discursive objects, particularly those who are 'positioned' by the discourse[91]. The messages about WP flowing from medical schools, which are powerful and influential institutions, may influence students and staff

perceptions of the value of WP and diversity in medical schools, and about the suitability of SURGs for studying medicine[72,160,181].

My analysis was guided by guided by Fairclough's approach, which has been used to analyse institutional beliefs about WP expressed by staff in medical schools[8,184]. Fairclough[185] suggests that three key components of analysis are essential for CDA:

1. analysing and describing linguistic features of the text
2. considering factors that may be influencing the text and its production, including attention to discourses that are foregrounded or backgrounded
3. situating the text within its social context, including whether existing dominant discourses are challenged or reproduced

However, Fairclough does not offer much guidance on actioning these imperatives. My initial reading of the texts, as a novice discourse analyst, were also supported by the relatively explicit process of approaching texts described by Willig[91,143]. Willig describes reading the texts several times, each time using a different focus[143](p112). In the initial readings of her texts, she asked:

- "*questions about what sort of assumptions appeared to underpin what was being said and how it was being said*"
- whether "*what was being said could have been said differently without fundamentally changing the meaning of what was being said*"

I employed both of these questions in my initial readings of the texts, and made notes as I familiarised myself with them. As I read the texts, I noted differences in the way that the texts presented several pertinent issues:

- What is the rationale for WP, or how it is justified?
- What is the 'position' of the university in relation to WP? (For example, is there a sense of responsibility / accountability)
- How are SURGs described or 'spoken to'?
- What is missing from the texts that I might have expected to see?

I then undertook a line-by-line analysis of the texts and identified linguistic, structural and rhetorical features used in the texts, such as register, tone and semantic groups of words, and grouped statements together according to how they constructed WP. Drawing on my understanding of discourses of WP from previous research (e.g., academic meritocracy in medicine[10,160]), I identified the types of discourses present in

the dataset and organised my findings into these categories. Some examples of the raw data with my notes and analysis are included in appendix G (p291).

6.3 Findings and discussion

The findings are initially described and analysed separately by institution to preserve their usefulness in supporting interpretation of the main research strands. Similarities and differences are then discussed.

6.3.1 University of Southampton Findings:

Two webpages about the BM6 programme were available on the UoS webpages. Both were included in this dataset, including the UCP and the Medical Education webpage (MSP).

The UCP contained 2454 words and appeared to be targeted at prospective students: it provided a detailed breakdown of the course including module content for each year and a section on how to apply to the programme. The MSP was 672 words. From discussion with my supervisor, I learned that these pages were originally used to inform medical educator audience, and produced when it was a new initiative. However, from reading the texts as an outsider, it was unclear who the intended audiences for this page were, but it was not explicitly targeted at prospective BM6 students. The MSP included information on how the programme was initially funded, key facts about student progression and the number of programme graduates, and listed accolades the programme has received.

Both UoS pages employed a mostly neutral tone (discussed below). Some structural and linguistic features suggested that WP was predominantly driven by a requirement by external regulators seeking fair representation in medicine for students from diverse backgrounds. However, the webpages also emphasised the medical school's long-term commitment to and success at supporting social mobility through the programme. SURGs were proudly championed as academically able, successfully graduating and entering the medical profession, thereby challenging the deficit discourse[33,72,186].

Rationale for WP: an external requirement for fair representation

The UoS MSP made several references to external stakeholders which require or encourage universities to undertake WP, including the '*Higher Education Funding Council for England'*, the '*Department of Health'* and the '*BMA*' [British Medical Association]. The webpage explained that these organisations have "*indicated the*

need" for improving socioeconomic representation in medical schools, suggesting that the main driver for WP at the UoS is a requirement by, and a response to, these stakeholders. This information was positioned at the beginning of the text, demonstrating its importance. The MSP promoted that the BM6 programme was successfully "*meeting its aims and the national agenda of widening participation to medicine from more diverse backgrounds*". A quote from the Council of Heads of Medical Schools on the webpage hints at a social accountability, value-based rationale for WP:

> *"'The social, cultural and ethnic background of medical graduates should reflect broadly the diversity of those they are called upon to serve'"*

However, the reasons for valuing diversity among medical graduates were not explicitly communicated. A discourse of social mobility was also invoked through frequent references to students successfully graduating the programme, "*gaining training places*" and becoming "*established within their specialist training*".

Although WP was presented as an external requirement, the university assumed responsibility for implementing WP through referencing their "*own strategic aims*" for the enactment of their WP policy. There was a slight tension between the medical school's aims (increasing representation of students from "*poorer socio-economic groups*"), and that of the wider profession (including cultural and ethnic diversity as an aim of WP). This tension may have an impact on what staff and students think about *who* WP is for, and perhaps *why* WP is required. The use of quotes from CHMS adds an authoritative voice to justify and validate the inclusion of WP in this medical school; presenting a call to WP action from a governing body within the profession suggests *what* WP is for and *why* WP is done, but says little about what its *value* might be.

The discourse of WP as externally required was further supported using a factual register and third person pronouns ("*it*", rather than "*we*" and "*our*" used in the UoA pages), throughout the webpage, creating an emotional detachment from WP. Even when presenting achievements of the programme, the page utilises non-emotive language such as "*Professor Curtis **talks** about*" and "*It was **featured** as a case study*". The verbs "*talks*" and "*featured*" are vague and non-descriptive, and create a neutral feeling around WP; choices like 'upheld' or 'endorsed', would convey pride and enthusiasm. 'Power' adjectives, typically used in a corporate setting[187], are used to

describe BM6, such as "***national** agenda*" and "***strategic** aims*". In contrast, the language used to describe general university services available to all students, which can be found on the BM6 UCP, is colourful and celebratory. For example, the careers section describes their services in the following way:

> *"We have a **vibrant** entrepreneurship culture and our **dedicated** start-up supporter, Futureworlds, is open to every student."*

The adjectives and the personal pronoun "*we*" in this section convey inclusion, passion and excitement which contrasts the language used to describe the BM6 programme.

There is little information, or promotion, about what is specific and unique to the BM6 programme in the two UoS webpages. Year 0 is mentioned three times in the MSP, but with no explanation as to what it is, what it involves, or why it is included. In the more detailed breakdown of the course, the UCP, most of the text is a direct replica of the text on the traditional-entry BM5 programme. There are no details about the additional bursary that is available to BM6 students anywhere, including in the 'Fees, costs and funding' section, nor any reference to the additional support that students are offered as part of their BM6 membership, such as third year workshops to prepare for the transition to clinical placement. Advertising these additional provisions would illustrate that SURGs are valued and that the university is dedicated to providing personalised support.

Finally, the repeated references to the duration of the programme contributes to an impression that the MSP is a performance report aimed at external stakeholders, to demonstrate the programme's efficacy:

> *"in 2002"*
>
> *"in 2000"*
>
> *"the longest running widening access programmes"*
>
> *"since its inception"*
>
> *"running successfully for over 15 years".*

This impression is further compounded by the frequent use of facts and statistics:

> *"Progression from Year 0 to Year 1 is about 90% and academic performance in Year 0 strongly correlates with future academic performance"*
>
> *"the 17th cohort"*
>
> *"approximately 600 applications for the latest cohort's 30 places".*

These rhetorical devices also fostered the factual and authoritative tone that underpinned the webpage. In CDA, an authoritative tone is thought to powerfully position the discourse(s) presented as the 'truth' which requires no justification or consideration of alternative perspectives[185]. Alternative perspectives about the purpose and value of WP, such as alternative value- or strength-based discourses, were absent. This supports the discourse that WP is being undertaken to meet external requirements for fair representation[45].

SURGs: Challenging the deficit discourse

However, emphasising the success of the programme also suggests that WP is valued by the medical school. The UoS MSP uses the word "*successful*" four times, suggesting that the medical school are proud of their record of WP in medicine, and through this convey a belief that WP is important. The university expresses pride in pioneering "*one of the longest running widening access programmes in the UK*". Moreover, the medical school insinuate that their WP places were awarded after:

> *"a successful bid to the Higher Education Funding Council for England (HEFCE) in 2000 for additional medical student places".*

Although it is not explicit, places for SURGs appear to have been a deliberate aim of the bid, implying that WP is valued and desired. The UoS MSP includes a section on "*National Acclaim for BM6*", communicating a wish to be recognised for their WP efforts and achievements.

Furthermore, the MSP uses intensifiers and possessive adjectives to suggest that the UoS medical school intend to continue undertaking WP:

> *"the numbers **still** only represent a very small percentage of the total number of new doctors qualifying in the UK each year"*
>
> *"the medical school's **own** strategic aims".*

These imply that the medical school have personal intentions for their implementation of WP and will continue working to realise their goals. Being more specific about the institutional aims, such as providing numeric targets[77], and the value added to the institution and profession by increasing socio-economic representation would enhance the impression of institutional commitment to WP.

The UoS MSP challenges a deficit model of SURGs, using statistics and figures to celebrate BM6 students' academic abilities and highlight their successes,

> *"Progression from Year 0 to Year 1 is about 90% and academic performance in Year 0 strongly correlates with future academic performance."*
>
> *"Over 130 BM6 students are now qualified doctors."*

Although these figures are not contextualised, it is implicit that these figures are positive. The academic competency of BM6 students is also foregrounded through its structural positioning on the webpages; academic performance is the first "key fact" about BM6, and is the first quality attributed to students in the section on "The BM6 Students", ahead of a paragraph that praises their capacity to connect with prospective students. The language used to demonstrate their academic successes is situated within a model of medicine based on an academic meritocracy: "*performance*", which connotes power and strength, is repeated in relation to academic attainment. Special attention is devoted to students who "*intercalate*" or undertake a "*Masters course*". The MSP also advertises that BM6 is a highly competitive course, "*There were approximately 600 applications for the latest cohort's 30 places*.", implying that students who successfully gain a place must be exceptional.

Discussion about the University of Southampton webpages:

Some linguistic and structural features of the UoS webpages suggested that BM6 is a policy-driven programme implemented in response to an external requirement, or "*national agenda*". WP was justified through the authority of external stakeholders such as the CHMS. The BM6 pages used a formal and detached tone compared to the UoA pages about G2M, and neither of the UoS pages actively promoted aspects of the BM6 programme that supported SURGs' needs, such as the bursary. If the discourses present on these online pages do reinforce institutional values, members of the UoS medical school may understand WP as a strategy for increasing diversity in medical schools, but not why this is important. WP may be perceived as an impersonal, policy-driven initiative that is undertaken in a perfunctory manner to meet "*strategic aims*" rather than to add value to the institution.

The formal tone adopted in the UoS webpages echoes findings by Graham, who noted a pattern between the institution 'status' and how WP was presented[176]: 'selective' institutions emphasised discourses of academic excellence and positioned themselves as prestigious rather than welcoming and inclusive. The UoS UCP used language of prestige and status ("*world-leading*") and revealed little about what made the BM6 programme suitable for students from WP backgrounds. This could reflect that the UoS is a Russell Group institution, whose website messages may be predominantly directed by an institutional or mission group corporate brand[176] rather than the values of the medical school and the BM6 programme leaders. Word choices are often constrained by the language and register required in the context[141]; the UCP may reveal the wider institutional culture rather than the culture of the medical school itself. This could lead to contradictory or unexpected findings in later stages of the study on perceptions of WP held by medical school staff and students, for whom the medical school may exert a greater influence than the wider institution.

The celebration of academic achievement above other qualities on the BM6 webpages suggests that BM6 students are valued as they fit into the model of academic meritocracy which currently determines success in medical school[10]. SURGs are further promoted as competent by references to SURGs successfully graduating the course and becoming "*established*" within different specialties in the profession, with an explicit mention that SURGs are graduating into highly competitive specialties including surgery. This message actively challenges deficit discourses attributed to SURGs and undermines fears that WP lowers the standards of medicine[7,188]. It may positively

influence perceptions of WP held by staff and students at the UoS medical school and empower both prospective and current SURGs.

Whilst it is important to positively promote the academic achievements of SURGs, foregrounding their academic contributions also reinforces the academic meritocracy. Focusing exclusively on academic excellence minimises other forms of excellence which are valuable in medicine. Communicative strengths typically associated with SURGs, like rapport-building skills with diverse patients[62], and helping their peers to better understand 'different' patient populations[85,88], are absent. This emphasis on academia could be reflected in participant discussions by foregrounding academic issues, particularly in discussions for students in the early years of study which are primarily based on university campuses and are highly academic. The attainment gap that exists on entry to medicine between WP and non-SURGs may still be present, students may have limited experiences of clinical placement experiences where other qualities such as building rapport with diverse patients may become apparent, and when students are still impacted by the admissions processes which tend to emphasise the discourse of academic excellence[181]. Staff and students may lack a nuanced understanding about contextual admissions, and there may be some stigmatisation of SURGs based on the grade requirements for entry onto the gateway programme.

There initially appeared to be tension between the two main discourses present on the BM6 MSP: justifying WP as an external requirement, and a strong discourse of WP student competence showing that SURGs are suitable for medicine. However, there are likely to be multiple discourses competing for dominance within a single context[90]; the discourse with the greatest authority becomes naturalised in their context and is no longer questioned. The different discourses may reflect different intended audience and purposes of the webpages. The BM6 MSP was *not* targeted at prospective students, unlike most university course pages. It justified the inclusion of WP using corporate jargon and a factual register rather than the persuasive and enthusiastic tone common to recruitment pages appealing to prospective students. This may partially explain why the BM6 page appears less positive and enthusiastic about WP, despite advocating for SURGs. Nonetheless, the page is publicly available and thus is likely to be accessed by students and staff seeking to learn about the different pathways to medicine available at the UoS. The potential impact of the message that WP is a requirement must therefore be understood outside of this contextual understanding.

6.3.2 University of Aberdeen Findings

Two equivalent webpages about the G2M course were available on the UoA website, and are included in this analysis. The UCP contained 554 words and provided a summary of the programme. The UoA MSP was 2053 words, and contained a high level of detail, suggesting that it is the primary source of information about G2M for prospective applicants. It included information on what the programme involved, eligibility criteria, and had a dedicated page detailing WP specific support and FAQs.

The pages employed a positive and persuasive tone and presented WP as desirable and valuable. However, a deficit discourse of SURGs was reproduced through presenting them as requiring psychological and social transformation to become suitable applicants for medicine. The university were positioned as powerful gatekeepers of the transformative process.

Rationale for WP: WP is transformative

The G2M web pages adopted a much more persuasive tone than the UoS pages, and indicated that WP was desired and valued. The MSP used personal pronouns to denote a personal responsibility for undertaking WP and an investment in its success:

> *"In **our** unique partnership with North East Scotland College (NESCOL), **our** G2M course will provide a novel, accessible and supportive route into medicine for these applicants...".*

Listing three positive adjectives conveyed their passion for the programme. The word "*novel*" taking the first place in the list highlighted both the newness of the programme and its originality, conveying excitement. "A*ccessible"* and *"supportive*" are encouraging and directly appeal to students who perceive barriers to HE, and imply that the medical school designed their programme to mitigate those barriers.

The UoA MSP frequently refers to how the course has been personalised to meet the particular needs of SURGs.

> *"**Drawing on existing best evidence** from the widening access literature and practice across the UK, we have **tailored** our entry requirements to the **specific Scottish context** of potential applicants", "has been **designed** to transform the aspirations and ambitions of secondary school pupils from a **widening access background**".*

These quotes demonstrate a commitment to optimising the programme for this specific groups of students, and indicates that time and effort has been devoted to understanding their needs and developing relevant provisions. This shows that the institution places value on SURGs and is willing to commit time and resources to recruiting and including them.

Furthermore, specific support is advertised for these students that is not available to others:

> *"supports your learning with: small-group learning, a **dedicated G2M tutor** who will work alongside and support you throughout the course, paid work experience, Up to **£2000 bursary** to support your studies".*

The use of personal pronouns ('you', 'your') to address prospective students creates a sense that prospective students already belong to the institution. The UoA MSP is explicit about the support and additional provision SURGs will receive. Adjectives like 'dedicated' are common throughout the webpages, giving an impression the UoA are committed to investing resources to support SURGs.

The UoA text demonstrates the institution's understanding of some barriers faced by SURGs applying to medical school, like typically lower levels of social capital and uncertainty about the expectations of medical school. They direct G2M applicants to a webpage detailing core values needed in the medical profession.

> *“The Medical Schools Council (MSC) have produced "A Statement on the Core Values and Attributes need to Study Medicine" which may be helpful when writing a personal statement.”*

This guidance may be particularly useful for students, families and schools with limited experience of the demanding requirements of the medical school application system. They also include a tailored FAQ and support page, anticipating what students might be unsure about, and providing easily accessible answers. The authors of the G2M pages directly invite SURGs on two occasions to communicate with them directly:

> *“For further information, please email: g2m@abdn.ac.uk”*

> *“Applications are very warmly welcomed from across Scotland.”.*

Only one reference is made to policy which requires universities to widen participation, and in this reference, specific figures are provided, demonstrating an ambition to achieve their personal goals for WP.

However, it is unclear what “deprived backgrounds” means, giving the institution power to make individual decisions about who should and will be accepted onto the course, rather than describing a more detailed and objective measure.

> *“Designed to support the delivery of the target set by the Scottish Government’s “Commission on Widening Access - Technical paper on measures and targets which is that by 2030, students from the 20% most deprived backgrounds should represent 20% of entrants to higher education”.*

The use of the future tense and active voice throughout the webpages convey optimism and excitement for the outcomes of the programme, “***will** allow them to reach their full potential and **become** doctors*”. The aims and outcomes of the programme appear to include a psychological transformation:

> *“been designed to transform the aspirations and ambitions of secondary school pupils from a widening access background in Scotland, and who may have considered that application to medical school is too ambitious, unrealistic and out of their reach.”*

This echoes the testimonial from the BM6 graduate at the UoS, who reported improved confidence and self-belief as an outcome of undertaking the BM6 programme. While it aligns with the positive and hopeful view of WP which underpins the two webpages, it also positions some SURGs as being unsuitable for medicine: as lacking in some way, and requiring change.

SURGs: Reproducing the deficit discourse

Many of the words used to present SURGs emphasised what those students were lacking in relation to what medical schools require of their candidates, and thus reproduced the deficit discourse.

Overlexicalisation gives a sense of over-persuasion and in CDA is thought to suggest that there is an ideological contention. In the G2M page, the positivity around WP suggested that WP is valued, yet the SURGs it seeks to recruit were portrayed as lacking ambition and aspiration, traits which are would not typically be desired in a highly competitive field such as medicine. This connotes that SURGs are not suitable for medicine and require transformation, which can be provided through the programme. By backgrounding other potential barriers to medicine that students from WP backgrounds face, responsibility for being unsuitable for medicine is put on individual SURGs. There was no acknowledgement of any systemic barriers within the current medical school system.

The UoA was positioned as a powerful provider of the solution, while students were portrayed as fortunate beneficiaries of the transformation. The use of weighted verbs, "*our G2M course* ***will provide***", "*that* ***will allow*** *them* [SURGs] *to reach their full potential and become doctors*" further contributed to this positioning, evoking a sense that the university has the keys, and the powers, to bestow the benefits to these lacking students. The MSP used the metaphor of medicine being "*out of their reach*" on two occasions, producing an image of SURGs physically and metaphorically stretching, changing, to become more appropriate medical school candidates. Similarly, the word "support" was repeated 17 times in relation to support that SURGs require, or that would be provided by the university. While SURGs may benefit from provision of additional support to thrive within current HE systems, the number of repetitions contributed to a discourse of WP student deficit that permeated the pages.

SURGs' social skills also appeared to be questioned. In the 'non-academic requirements' section of the UoA MSP, a number of skills and attributes were listed that applicants are required to demonstrate in their application:

> *"Motivation to study medicine*
>
> *An insight in to your own strengths and weaknesses (these may be learnt through work experience, paid employment and personal experiences)*
>
> *Can communicate effectively*
>
> *Are able to interact with others*
>
> *Resilience and the ability to deal with difficult situations*
>
> *Empathy and the ability to care for others."*

Most attributes are listed as nouns: "motivation", "insight", "resilience", "empathy". However, the communication skills are presented in a different format, using verbs "***can*** *communicate*", "***are able to*** *interact*". It is unclear why this shift has occurred and why the way they are written do not match the other requirements, from asking prospective applicants to demonstrate what they *do* possess, to showing what they *can* do (as opposed to what they currently do). One implication is that SURGs are not expected to be able to evidence these social skills. This contrasts the non-academic requirements listed on the standard-entry UCP, in which candidates are requested to demonstrate "good communication skills".

Moreover, the social skills of SURGs are raised in terms of their ability to integrate:

> *"Students will be encouraged to fully integrate with the medical school community."*
>
> *"To minimise the risk of isolation and to support integration into wider university life.".*

To identify this concern as a 'risk' may have implications about SURGs' willingness or ability to form relationships with others, which is another important skill for medical professionals. This may relate to the fact that half of the study completed during the G2M programme is undertaken as a local college; however, this is not clear in the webpages and, coupled with messages about their lack of psychological attributes such as ambition, reinforces the deficit model of WP applicants.

6.3.3 Discussion about the University of Aberdeen webpages

The UoA webpages used a persuasive and positive tone, using adjectives and verbs ("*dedicated*", "*committed*") which illustrated a desire to be recognised for their commitment to WP. The use of personal pronouns ("*our G2M programme*") insinuated a personal accountability for the implementation of this WP initiative, while the discourse of WP as externally required was only briefly noted. Linguistic choices suggested that the programme was "*tailored*" to the specific needs of SURGs, creating an emotive and inclusive tone, inferring care and empathy. The tone used across the two UoA pages was typical of a marketing campaign, perhaps reflecting that it is a relatively new course.

The text on the UoA webpages aligned with a discourse of WP as individually transformative, designed to "*transform the aspirations and ambitions*" of students from 'disadvantaged' backgrounds and provide experiences which would "*allow*" these students to realise their potential. This may positively influence perceptions of WP (and the university). However, it suggests that prior to taking the G2M programme, WP applicants are unsuitable to study medicine. This is primarily attributed to socio-psychological attributes, such as a lack of aspiration and ambition. Here, the university fails to take any accountability for their role in an inequitable admissions system, or recognise the systematic and societal disadvantages that students from rural and poor backgrounds face on their journey into medical school. Instead, the UoA webpages individualised the barriers to medicine, placing responsibility onto students. Verb choices positioned the university as generous benefactors of the transformative experience, "*allow*", "*provide".* Consequently, perceptions held by UoA staff and students may be centred around WP as an *opportunity* for SURGs, with benefits flowing from the institution to the students. The students are strongly positioned as requiring support, echoing findings by Alexander and colleagues[72].

This reinforces the message that WP is not embedded into the medical school. Advertising a discrete, one-year course does not promote a belief that WP should be entrenched into the medical school systems, nor does it provide a sense that the medical school have adapted to become more inclusive of SURGs. Rather, the UoA introduced a programme to transform SURGs to become more suitable to study medicine within the current systems and beliefs about who can, or should, become a doctor. Students who have completed the G2M programme are implicitly presented as being 'suitable' to study medicine at the end, equal to their peers who accessed

medicine without G2M. This suggests that the G2M students on the UoA medical degree will be perceived as belonging to the medical school, having earned their place through their transformative experiences on the G2M programme.

The absence of discourses on the webpages that recognise the strengths and contributions that students from non-traditional backgrounds can bring to a medical school may be mirrored in staff and student perceptions, who may struggle to identify benefits of including more WP and diverse students. This will be examined in the next phases of this study, exploring perceptions of WP and diversity in the medical schools.

6.3.4 Similarities between the pages

Although the pages were largely different in how they presented WP and SURGs, there were two consonant features between the institutions. Firstly, both universities presented WP as an additional, or supplementary requirement for teaching medicine, rather than something which should be embedded or entrenched into the wider institution and normal admission and teaching practices. This is unsurprising given that the two webpages are promoting the gateway programmes; distinct pathways to medicine designed specifically to support the needs of SURGs through a preliminary year of study. For the UoS, one discourse implied that WP was driven by external agendas to fulfil a societal need. In the UoA webpages, WP was presented as something that is required to transform SURGs prior to their application to the standard-entry programme, to ensure that they become suitable for studying medicine. These messages could impact the integration of gateway students into the wider student community, and their sense of belonging in the medical school. They send a message that WP should be accommodated within pre-existing models of medical education, rather than acknowledging a need for institutional transformation.

Secondly, neither institution explicitly drew on values-based or social accountability discourses about increasing the diversity of students that are becoming increasingly prominent in academic literature, such as improved cultural competency[85,89,134], critical thinking skills[88,132,133], and more even workforce distribution to underserved areas[83,84]. This is particularly surprising for the UoA, given that they made specific reference to using "*best evidence from the widening access literature*" to guide the development of the programme (although the term 'widening access' rather than 'widening participation' suggests that their research focused on helping students to 'get in' to

medicine, which may explain this discrepancy). In accordance with findings by Alexander[72] and Razack[160], both of these webpages suggested that the purpose of WP was to increase representation of students from currently underrepresented groups in medical schools, revealing what WP is for, but not why it is done. To introduce a values-based rationale for increasing diversity would require an institutional transformation in the understanding of "excellence" within medicine and entail promotion across the *entire* medical school. Only including values-based forms of excellence on WP pages would risk 'Othering' SURGs by marking them out as different, perhaps undermining their academic abilities, and risk alienating non-SURGs by limiting their potential contributions.

This analysis, like others, revealed little consensus between different institutions in how WP and SURGs are presented[72,160,176,177]. The UoS webpages presented a both a target-oriented version of WP that was externally required, and pride in the medical school's success at their contribution to diversifying the workforce. The UoS webpages also challenged the deficit discourse of SURGs. Conversely, the UoA webpages presented WP as valuable and desired by the wider institution, but portrayed SURGs as lacking socio-psychological attributes required for studying medicine. There are many possible reasons why these pages are more different than similar, despite marketing what may appear on the surface to be a similar 'product'. For example, the differences could stem from influences such as philosophical beliefs about WP[172,189].

6.3.5 Limitations

There are limitations to exclusively using texts from institutional webpages as a data source; UCPs can be constrained by official University formatting guidelines, policies about marketing materials and website content, and broader institutional values such as academia and scholarship[160,181,190]. This may limit the potential influence of the medical schools on the published content, and therefore the findings here may not accurately represent the culture of the medical schools.

It would be useful to compare the findings of this analysis with a similar analysis on the webpages for the non-WP medical degrees, or for other subjects, to determine whether important aspects of the text such as the tone used, or grammar issues, are exclusive to WP pages or whether similar issues are present for other course pages too.

I do not know who wrote or edited the copy for the webpages, it is likely to be more than one person. CDA is commonly used in analysis of discourses present in media

texts, and it is common to research the author of the texts being analysed to better understand the background and the possible motivations for writing the texts, and factor this into the analysis[187]. I could potentially gain this information by holding interviews with appropriate members of the institutions (for example in Marketing and Communication, and the programme leads for the gateway programmes). However, previous researchers examining discourses of WP in university marketing materials have also assumed that publicly available institutional webpages are guided by policy which should reflect institutional values, and typical readers are likely to assume this[72,176].

The above factors may lead to dissonant findings between this research study and the findings of studies 2 and 3 (Chapters 7 and 8). This will be taken into consideration when contextualising later findings within their case.

Nonetheless, the findings from this CDA remain useful for understanding the messages that each institution promote to the public about WP, diversity, and who is suitable to study medicine. As the findings of this study contribute possible insights into the institutional beliefs about WP and diversity, they may add an additional perspective from which to interpret the UoS and UoA participants' perceptions of WP and diversity in the next stages of study.

6.4 Conclusion

Through undertaking a CDA of gateway programme webpages, I identified largely dissonant discourses about WP present in online communications from each institution. CDA suggests that discourses from powerful institutions such as universities can powerfully shape how people think, feel, and behave about 'discursive objects', suggesting that the different discourses about WP present in the webpages may enable and constrain how members of the institutions (as well as prospective students and their families) perceive WP and SURGs. These findings suggest that the institutional cultures of the UoS and the UoA may be different and highlight the value in undertaking a regular, comprehensive contextual analysis of the medical schools. In this process, it is essential to gather and include the views of a wide range of stakeholders and ensure that the publicly available discourses fairly reflect the beliefs of staff, and the institutional aims.

In this chapter, I developed the contextual understanding of the two cases. I gained a richer understanding of institutional aspects which may shape perceptions of WP and diversity in the two medical schools. In the following research strands, I sought to understand individual and group perceptions of WP and diversity within the UoS and UoA medical schools and explored interactions between students from different backgrounds.

6.4.1 Summary of key differences between the two cases:

University of Southampton	University of Aberdeen
Rationale for WP: an external requirement for fair representation	**Rationale for WP: WP is desirable and transformative**
Regulators: E.g., 'HEFCE', 'BMA'	**Personalised course:** *"Drawing on existing best evidence"*
Formal tone: Factual register, statistics	**Positive tone**: *"dedicated tutor", "novel", "unique"*
Representation: *"The [...] background of medical graduates should reflect broadly the diversity of those they [...] serve"*	**Social mobility:** *"Will allow them to reach their full potential"*
WP students: challenging the deficit discourse	**WP students: reproducing the deficit discourse**
BM6 is competitive *"approximately 600 applications for the latest cohort's 30 places."*	**Psychologically lacking:** *"designed to transform the aspirations and ambitions"*
Academically strong: *"Academic performance in Year 0 strongly correlates with future academic performance."*	**UoA as gatekeeper**: , *"our G2M course **will provide**", "that **will allow** them"*
Successful: *"Over 130 BM6 students are now qualified doctors."*	**At risk:** *"risk of isolation", "encouraged to fully integrate"*

Chapter 7 Valuing difference: Perceptions of WP and diversity in the UoS and UoA medical schools

7.1 Background

Having established the cases, the institutional context and how they present WP on their webpages, I sought to explore how WP and diversity were perceived within the UoS and UoA medical schools. I wanted to identify, magnify and interrogate any similarities and differences in staff and student perceptions about WP and SURGs, and explore how those might relate to differences between the institutions.

In Chapter 3, I presented research showing how perceptions of WP can be shaped by a deficit discourse[75,98]. However, research on ethnically diverse medical cohorts demonstrates that diversity is perceived as adding value to the classroom through enriching classroom discussion and improving critical thinking skills[88,133]. At the same time, medical students from underrepresented backgrounds have reported discrimination at medical school[34,63] and most research suggests that there is little integration between students of different ethnicities or classes[32,114]. Little is known about how other forms of diversity are perceived to impact students' experiences of medical school, and few studies have explored how gateway programmes affect the WP student experience or how WP is perceived by institutions. I wanted to disentangle some of these tensions through discussing these issues with a variety of stakeholders in the medical school, including students and staff.

The ways that people from different groups are perceived can affect the way they are treated by others. Shore et al. present a framework of inclusion which outlines how uniqueness ("*the need to maintain a distinctive and differentiated sense of self*" (p1264)) and belongingness ("*the need to form and maintain strong, stable interpersonal relationships*" (p1264)) interact to engender assimilation, differentiation, or feelings of inclusion. Figure 9 below defines these terms and visually represents the ways that they can interact[191 (p1266)]).

	Low Belongingness	High Belongingness
Low Value in Uniqueness	**Exclusion** Individual is not treated as an organizational insider with unique value in the work group but there are other employees or groups who are insiders.	**Assimilation** Individual is treated as an insider in the work group when they conform to organizational/dominant culture norms and downplay uniqueness.
High Value in Uniqueness	**Differentiation** Individual is not treated as an organizational insider in the work group but their unique characteristics are seen as valuable and required for group/ organization success.	**Inclusion** Individual is treated as an insider and also allowed/encouraged to retain uniqueness within the work group.

Figure 9: Shore et al.'s framework of inclusion

When individuals within a group develop a strong sense of inclusion, all members of the group benefit[85,88,20]. Inclusion has therefore attracted increasing attention in medical schools as a possible mechanism for addressing differences in attainment and retention[39,166,192,193].

7.1.1 Research questions

Through this study, I examined the perceptions of WP and diversity at the UoS and UoA, utilising context as an analytical tool in which to ground my interpretations[157]. Research question 2 is:

> *How are widening participation and students from underrepresented groups perceived by medical school staff and students?*

Shore et al's understanding of inclusion (figure 9) provided a helpful framework for interpreting the patterns identified in the results of this study[191].

7.2 Methods

In chapter 4, I presented the overall methodology for this thesis, including use of a constructivist paradigm and case study design. In this section, I describe the methods particular to this aspect of the case study, including the recruitment process, using focus groups to generate data and applying Thematic Analysis (TA) to analyse those data.

The subsidiary questions used to address this second research question are slightly different for each institution, reflecting differences between the degree pathways offered and gateway programme structures and duration.

Three subsidiary questions guided the focus group interview framework for both medical schools:

1. *What do students and staff understand about widening participation to HE and to medicine?*

2. *How do students from different backgrounds (and for the UoS, on different programmes) interact, and how do students from underrepresented groups experience inclusion?*

3. *Does interacting with students on from different backgrounds (and for the UoS, students on different medical degree programmes) impact on students' experiences during medical school?*

The term 'experiences during medical schools' is deliberately broad, encapsulating formal and informal learning in a range of different environments, such as an academic context like a tutorial, or in a social context. It could include psychological and emotional aspects of learning, as well as academic knowledge.

At the UoS, when speaking with participants, I used "different medical degree programmes" to elicit perceptions of students enrolled on the range of programmes run at the UoS, which recruit students from diverse demographics and backgrounds. This encouraged participants to talk about medical students from a range of different backgrounds without me referring to specific demographics and influencing participant responses.

This was not possible at the UoA as all students, including former G2M students, are enrolled onto the same programme. While I did ask participants about G2M, the G2M programme was relatively new, and as G2M students are not formally recognised as former G2M students, I felt that participants would be perhaps less aware when they were interacting with one compared to the UoS (who did all seem to be aware of students' programme membership). This encouraged focus on the specific institutional context and personal experiences. Most UoA participants referred to students who met WP criteria such as coming from a rural or remote background, from a low socioeconomic background, or who had participated in a REACH programme (an in-school WP outreach programme).

7.2.1 Data type and collection: focus groups

The review of previous research on perceptions of WP and diversity in HE and medical schools suggested that a diverse range of views were likely to be present in this study. To gain an initial insight into the scope of perceptions, I sought a data collection method that could provide access to a wide range of opinions. A group-research method, such as focus groups, was therefore appropriate.

Cresswell describes the purpose of a focus group as to "*provide a researcher with information about how a group thinks about a topic, to document the range of ideas and opinions held by members of a group and to highlight inconsistencies of beliefs among members in a particular community*"[194 (p124)]. Exploratory focus groups are an ideal tool for exploring under-researched topics where there is little empirical data[141]. They can elicit a wide range of understandings about an issue from a range of different perspectives within a limited timeframe[195]. Focus groups align well to constructivist epistemologies as they are a "*socially oriented procedure*"[141 (p389)].

Focus groups are particularly useful when trying to elicit views of underrepresented groups within a community[140,196], as speaking to others 'like yourself' can be less intimidating than speaking singularly to a researcher who may be seen as different, or as an 'outsider'. They are often chosen when a researcher believes that "*interaction among interviewees will yield the best data*"[194 (p124)]. Group based data collection can cause limitations as not all participants will be comfortable discussing sensitive issues. I therefore chose to run focus groups for specific participant groups based on student degree programme and year, and for staff professional roles, rather than using mixed participant groups, to improve participants' comfort and openness. Braun and Clarke recommend including 5-10 participants in a focus group for collecting high quality data

inclusive of a diverse range of viewpoints, while enabling the researcher to manage the group easily[140].

7.2.2 Participants and recruitment

Students in Years 1-3 and academic staff from each medical school were invited to participate in this study. Students in years 1-3 of the degree were chosen to explore how inclusion developed during the initial opportunities for integration and through the academic period of study when students study alongside each other regularly (after this point, students spend most of their time in clinical settings on placements). Academic teaching and administrative staff were chosen as they have more interaction with students during this period than other staff groups, such as clinical mentors.

Ethical approval was granted by each institution before I approached prospective participants (ERGO 47542 and CERB/2019/12/1850, both in Appendix H, p293). All documents associated with collecting data (e.g., Participant Information Sheet, Interview Framework) were adapted for use at the UoA and are also included in appendix H. I was able to follow identical recruitment protocols at the UoA to those used at the UoS with the support of a Research Fellow (KG) based in the Centre for Healthcare Education Research and Innovation

Whole year-group cohorts of students were introduced to the study through a short verbal notice at the end of timetabled lectures at least one week ahead of scheduled focus groups, with permission from the module leads and lecturers. This was done by myself at the UoS, and by KG at the UoA (who also supported me administratively by helping with the ethics application and booking rooms). We provided prospective students with an outline of the research and explained its purpose and what participation would involve. Interested students provided their contact details, took a Student Participant Information Sheet and Consent Form and were given an open opportunity to ask questions.

We identified staff at each institution who regularly teach medical students in Years 1-3 and communicated with them by email four weeks ahead of the provisional focus group dates. We used a polling website to identify suitable times to hold focus groups. All staff were sent a Staff Participant Information Sheet (adapted from the student version) and invited to ask questions.

An email reminder was sent the day before the focus group to individuals who had indicated an interest in participating. Focus groups were held at a time and location convenient to participants with respect to their academic schedules.

Focus groups participants were grouped (as far as possible) by their programme, year of study or professional role to minimise potentially difficult power dynamics, enhance participants' comfort and encourage candour. For example, BM5 Year 1 students were grouped separately to BM5 Y2 or BM6 Year 1 students. Similar numbers of participants were sought for each institution. This created a lot of potential groups: 12 at the UoS and 7 at the UoA. I recognised the potential challenges of generating and analysing data from 19 focus groups for the purpose of a scoping, exploratory study; however, through discussion with my supervisors, I felt that the benefits of conducting separate focus groups outweighed these risks and would be manageable. We also agreed that the potential breadth of data would be useful for developing the research questions for the following research strand in this case study.

I moderated the focus groups myself, which can impact the authenticity of the data; participants are more likely to offer more socially desirable responses to the group in the presence of the official researcher[140,141]. This could be a particular issue when discussing a sensitive and potentially controversial topic like diversity. I provided food and drink and chatted with participants for a few minutes before beginning the focus group protocols to foster a natural and relaxed, conversational atmosphere and thus minimise this potential for inauthentic data.

I developed and used a flexible question framework to structure the focus groups (see appendix H), including prompts to elicit participants opinions and encourage group discussion[140]. The questions began broadly with a discussion of WP in general, and narrowed down to explore the perceived impact of WP and diversity within the institution[141].

I chatted to participants before and immediately after the focus groups, at times when the audio-recorder was turned off. At these times, participants often engaged with me about the topics of WP and diversity, expanding on certain discussion points, offering opinions, asking questions or challenging ideas that emerged during the focus group. They occasionally revealed contextual information about the medical degree programmes, the institution or the city in which the university is based. I made note of these conversations in a field notes log, along with my initial thoughts and impressions

of the focus group discussions. An anonymised example of my field notes is included in appendix I (p318).

7.2.3 Analytical approach: Thematic Analysis

For each institution, I transcribed the first three focus groups. It wasn't always possible to identify who was speaking, preventing a more linguistic analysis of how ideas were discussed (or by whom). All other transcripts were prepared by an external company, as I did not need to become familiar with 'who' was speaking. I listened to the audio recordings and quality-checked these transcripts to begin 'immersing' myself in the data.

As I was seeking to compare perceptions of WP diversity between participant groups within and between cases, I chose an analytical method that would allow me to identify patterns in the data, Thematic Analysis (TA)[141]. I began analysis by inductively coding data from each institution separately, grounding the codes in the data following Braun and Clarke's iterative and reflexive analytical process[197-199]. An example of my early coding is included in appendix J (p320).

I randomly selected two transcripts to practice "stepwise replication" with two of my supervisors[145]. Each person individually coded two transcripts, which we reviewed and critically discussed together to explore our occasionally conflicting interpretations[198]. We recognised that there would be a huge number of codes, and the reflexive form of TA I had hoped to use would not be appropriate within the time frame. I therefore evolved my coding strategy by co-constructing a coding framework with my supervisors, shifting to a more "hybrid" style. I coded the other transcripts independently, frequently reviewing and adapting my initial codes, and began grouping them into provisional themes. I shared and discussed these themes with a group of other qualitative research students in the medical education department undertaking research on similar topics. This process greatly informed the development of my analysis by ensuring I considered alternative perspectives, and highlighted the impact of my values and perspectives on the analysis[198] (for example, I had noted but not really considered the significance of the relative absence of negative views about WP).

When I presented my final themes to my supervisors, we identified that differences in how participants discussed gateway student integration and inclusion bore similarities

to Shore's inclusion framework, entailing notions of interactions between belongingness and uniqueness[191]. This framework was not deemed suitable to apply retrospectively as a theoretical framework to analyse all the data in relation to the research question (for example, it did not include aspects such as type and frequency of interactions), but Shore's definitions of belonging, inclusion and assimilation were used to refine our understanding of the original codes and develop a schematic. I merged the central organising themes and gave them more descriptive titles to facilitate a clear, visual summary of the patterns identified in the data (figure 2 below). I interpreted the findings in relation to the institutional contexts and gateway programme designs.

I revisited the full transcripts to ensure that these interpretations were credible and fair. I drafted a research paper based on this study and sent it to the G2M Programme Lead to confirm the accuracy of contextual factors and to check whether my research displayed any biases, as all my supervisors and the research team are affiliated with the UoS. The G2M programme lead confirmed that the findings fairly and reasonably reflected the UoA experiences. The manuscript was also approved by the BM6 Programme Lead.

7.3 Findings

In this section I present the findings from the student and staff focus groups at the UoS and the UoA separately for clarity, then discuss them together to magnify the differences.

7.3.1 Participants

At the UoS, 46 students and 6 staff members took part in 12 focus groups. The median length of focus group was 32:02 minutes, and the total number of minutes was 420.35. No BM4 Year 2 students volunteered to participate.

At the UoA, 19 medical students and 7 staff members participated in seven focus groups. The median length of focus group was 41:21 minutes, and the total number of minutes was 292.24. Group sizes ranged from 2-7 participants. Unfortunately, no G2M Y1 students volunteered to participate in the study. Participant groups and numbers are included in table 5 below, while demographic data about participants, including self-reported gender and ethnicity, are included in table 6.

Students on BM6 and former G2M students were overrepresented in the focus groups compared to their representation in the medical schools.

Acronym	Participants	Number of UoS participants	Number of UoA participants
TS	*Teaching Staff*	*3*	*4*
AS	*Administrative Staff*	*3*	*3*
BM5 Y1/2/3	*Student enrolled onto the UoS traditional-entry, 5-year medical degree in their first, second or third year of study*	*14*	
BM6 Y1/2/3	*Student enrolled onto the 6-year UoS gateway programme. Students in BM6 Year 1 (Y1) are in their* second *year of studying, following on from Year 0 (See 'Institutional Contexts')*	*10*	
BM4 Y1	*Student enrolled onto the UoS graduate-entry, 4-year medical degree in their first year of study*	*7*	
BM(EU) Y1/2	*Student enrolled onto the UoS 5-Year medical degree programme partnered with Kassel University in their first or second year of study*	*15*	
G2M Y2	*Student who has completed the 1-year UoA gateway programme, and is now enrolled onto the 5-year, traditional-entry programme and in their second year of studying for the 5-year medical degree*		*5*
Non-G2M Y1/3	*Student enrolled onto the traditional-entry, 5-year medical degree who did NOT participate in the gateway programme, and is in their first or third year of study.*		*14*
Total		*52*	*26*

Table 5: Participant acronyms used in the findings and numbers of participants

Table 6: Self-reported gender and ethnicity of all focus group participants

Programme	Male	Fe-male	*Asian British /Chinese /Pakistani*	*Black African /British /German*	*Mixed Ethnicity*	White British/ German /Irish / Scottish	*Total*
Teaching staff (TS)	5	2	1	0	0	6	7
Administrative staff (AS)	0	6	1	0	0	5	6
BM5 Y1/2/3	7	7	1	3	0	10	14
BM6 Y1/2/3	5	5	2	6	1	1	10
BM4 Y1	2	5	1	2	1	3	7
BM(EU) Y1/2	4	11	0	1	2	12	15
G2M Y2	2	3	0	0	1	4	5
Non-G2M Y1/3	4	10	3	1	0	10	14
Total	29	49	9	13	5	51	78

Key themes were identified for both institutions: focus on perceived differences between students, patterns of integration and inclusion, and perceived benefits of diversity. However, how these phenomena were realised within the medical schools differed (Figure 10).

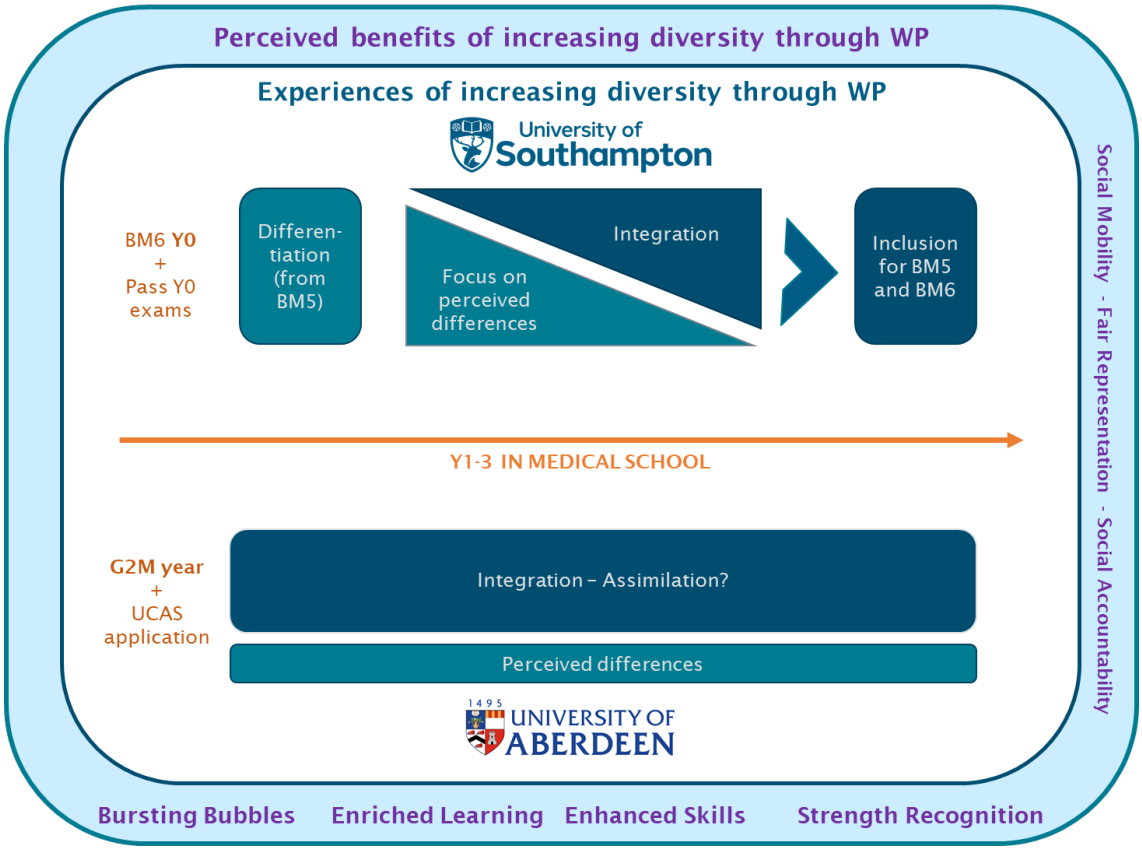


Figure 10: Visual representation of focus group themes

As represented in figure 10, all participants described similar benefits of increasing diversity and WP for improving both medical education and the profession, as well as social mobility. However, participants' experiences of interacting with students from different backgrounds differed between the two institutions.

At the UoS, participants perceived significant differences between students from different backgrounds in the early years of study, which inhibited their integration. Participants reduced their emphasis on these differences over time, and a synchronous increase in integration was identified, leading 'diverse' students to experience inclusion.

At the UoA, G2M students who progressed onto the medical degree were perceived to integrate easily into the main medical school and degree programme. Some differences between former G2M students and non-G2M students were acknowledged, but perceived as minimal and inconsequential. While all participants felt that WP and increasing diversity were beneficial, some questioned the necessity of diversity for achieving the suggested positive outcomes, or felt that standardisation processes

within medical education might create assimilation and limit the potential impact of diversity.

These themes are discussed (and evidenced) in detail below.

7.3.2 University of Southampton

Understanding of WP and diversity

Ten participant groups began by discussing meritocratic, social mobility and rights-based discourses for fair access to education, reflecting the dominance of this discourse within UK medical education[2,72]. Social mobility discussions were about "fairness" of opportunity and the expectations and aspirations of SURGs who have previously been excluded from medicine: "*I just felt like wow, like this isn't closed off to me*" (BM6 Y2). WP was described as bringing SURGs 'up' to an appropriate level, to permit them to study medicine: "*getting more poor people, more disadvantaged people into areas of life, higher up or in higher positions*" (BM5 Y2).

Participants on the BM5 and BM(EU) programmes commonly reinforced the discourse of academic meritocracy within medicine, "*Everyone deserves a wide spectrum of the possibility of education, no matter where he comes from, according to their abilities of course*" (BMEU Y2); although many acknowledged the tension this posed to student admissions, particularly for those from disadvantaged backgrounds. Most acknowledged that the medical application system is "*rigged in their favour*" (BM5 Y1), but still drew on a deficit discourse when discussing how best to support SURGs to enter medicine, considering the "*exact corrections you need to make*" (BM5 Y1) to SURGs to increase their admissions.

Social accountability discourses included issues of representation in the profession for improved healthcare and the subsequent increase of relatable role models in the profession for future generations: "*when you see the same people in positions of kind of that you want to get there, and that's something I never saw growing up... so, we've never had something to aspire to*" (BM4 Y1).

After enrolment, the construction of medical school as a "*level playing field*" was widely contested within and between participant groups. Where the purpose of WP was described as widening ***access*** to medicine, participants suggested that SURGs achieve equality once on campus, "*I don't think it makes a difference where you're*

from, it doesn't really affect you, [...] we're all learning the same things" (BM6 Y2). Indeed, many participants initial response to my question about differences between students was to dismiss the existence of meaningful differences which could impact experiences of medical school: "*we're all here, it doesn't really matter*" (BM5 Y2).

However, this view strongly contradicted the social separation of students from different backgrounds, which several groups joked could be "*plotted*" into "*cliques*" on a lecture theatre seating plan. An unspoken social hierarchy exerted an emotional toll on SURGs, including BM6 students and SURGs on BM5. The language used by one LSES student in BM5 suggested that the marginalisation of LSES students could be predatory and isolating: "*I've actually just met people who are higher up in the food-chain*" (BM5 Y1). Within a few minutes of each focus groups, participants identified many symbolically-distancing differences between students from different backgrounds.

Perceived differences

All participants perceived differences between medical students on different programmes, especially regarding work ethic and socialising habits. These differences impacted the quality and frequency of student integration in years 1 and 2: "*You are friends with the people who are similar to you. And I don't really find I'm that similar to them, quite a lot of the BM6 people*" (BM5 Y1). Some BM6 participants experienced discrimination in Y1, "*at the beginning, people say, 'oh he's a BM6, maybe he needs extra help, maybe he's not as intelligent as us', but as you get through and you complete each stage of your medical degree […] no longer that image stays*" (BM6 Y2).

Similarly, one member of staff at the UoS described how their own expectations of BM6 students had developed over time: "*my [initial] thoughts were that they would struggle, or if I saw a struggling student I questioned 'is that a BM6 student?' However, since I've been here, for 4 years now, I've actually been really pleasantly surprised by the BM6 students and their performance*" (TS).

Staff participants mentioned that BM6 students were often "*lacking confidence*" (TS) in the early years and required higher levels of pastoral support as "*perhaps they are not as supported by their families or their outsider environment or their health as we'd want them to be*" (AS). All staff considered it essential for institutions to welcome and make adequate support available to BM6 students. However, the provision of intensive support through segregating cohorts was a complicated issue for teaching staff "*there*

is some element of it [BM6] which potentially disadvantages our biggest cohort [BM5], and I think if we are truly thinking about merging and being serious about WA, we should probably do it in a more blanket way, and not allow for stigmatisation which [it] probably does" (TS). Similarly, some BM5 students expressed envy at the relationships between BM6 students and BM6 teaching staff, "*they sort of look after them*" (BM5 Y3), while some BM5s felt inadequately supported.

Focus group participants on the BM6 programme described their BM6 peers as "*a family*" (BM6 Y3). One BM6 student felt that many of the BM5 students found it easy to get "*settled*", because they came from "*similar backgrounds... the same culture*" which allowed them, due to their proportionately greater numbers, to "*recreate that culture here*" (BM6 Y2), from which the BM6 student felt excluded. Some BM6 students found it difficult to relate to BM5 students, "*I was a bit nervous to be around them... They seemed unapproachable to me*" (BM6 Y1).

The closeness of BM6 students was also noted by staff, which for some represented a potential concern: "*And that sometimes is an issue for them if one of them for example has to re-sit a year [...] that can be quite a challenge*" (TS), although this concern was never raised for BM5 students needing to re-sit a year. This prompted some staff participants to discuss the merit of giving BM6 students a "*little push*" to integrate (TS). However, BM6 focus group participants viewed institutional encouragement to integrate with BM5 students as threatening to their BM6 relationships, "*If we do that, then you're going to forget all the friends you had before*" (BM6 Y1).

Integration

Focus on perceived differences decreased as students progressed through medical school. Sharing several years of the joys and stressors of medical education experiences helped students to bond. Integration increased throughout the years, particularly as students began undertaking full-time placements and "*the playing field has levelled out*" in the unfamiliar territory of teaching hospitals (BM5 Y3). Clinical placements helped students to develop their identity as a medical student rather than as a student who belonged to a particular programme.

Benefits of diversity

Irrespective of integration, all participants championed WP and valued the perceived differences in the medical student educational experience. Interacting with others from

different backgrounds helped to "*burst your bubble*" (BM5 Y1), to acclimatise medical students to diversity, preparing them effectively for their future experiences with patients and colleagues from different backgrounds, *"now I know people from different backgrounds, whereas I didn't know that many people from diverse backgrounds before*" (BM5 Y3). One participant felt that, without diversity, their expectations of patients would be misinformed, "*if there weren't other people on our course from different backgrounds, then yeah, we would slip into a bubble, like at private school, how everyone expects everyone [to] have loads of money or be able to afford loads of things*" (BM5 Y1), which might have dangerous implications for healthcare provision. Interacting with diverse students in medical school was thought to help students be better prepared to help diverse groups of patients, "*it helps BM5s, because they're probably not used to different people from different backgrounds. It helps them to be exposed to different people, so, when [they] go into like the community, start treating patients, they're a bit more aware of different cultures*" (BM6 Y2)

BM6 students' active contributions to promoting inclusivity in the medical school were reported: "*they pick on things that you don't even think about because you just do the norm. Someone raised that all of our practice bodies are white – and you sit and go, 'I never would have figured that!*'" (AS). Increasing diversity through the BM6 programme was described as bringing new ways of thinking to the wider student learning experience, helping students to become more open-minded, "*some of the BM6s see Medicine in a different way to how I would, and so, bringing everyone together, they're like, oh, this is good, but it could be better... I wouldn't think to improve it. But I think oh, that's a good idea, yeah, let's have a go... it stretches your mind*" (BM5 Y3). These diverse perspectives and experiences were described as being catalysts for progression and change "*You don't want just a massive cohort of doctors all exactly the same, because... there'd be no motion for change... it would all be the same. It wouldn't be very good, I don't think if there was no like uniqueness amongst doctors*." (BM6 Y3).

Studying alongside a diverse cohort helped to "*enrich*" the student experience (TS). Having a diverse range of perspectives in group discussions was considered to provide a more comprehensive understanding of medical conditions among different population groups[88,89]. For example, some student participants reported that the curriculum often focused on the "*textbook, white male*" (BM6 Y1), and described a class discussion instigated by a BM6 student on how jaundice might present on different colours of skin, "*you can't see it in my skin colour, what am I meant to do if I'm there?"* (BM6 Y2). Although most examples like this related to race (e.g., different skin-colour or types of

hair), some students also recounted developing insights and empathy about the social determinants of class on life choices and health outcomes: "*from my background, [I] have not been exposed to, for example, obesity and smoking... oh it's just laziness, but actually, no, they have had a very different experience... I think actually having that diversity it's so important for empathy*" (BM4 Y1).

Interacting with BM5 students from more 'traditional' backgrounds helped BM6 focus group participants to value their own differences, such as cultural insights that they could contribute to broaden class discussions, or the benefits of speaking multiple languages: "*You appreciate what YOU can bring as well. If I was only with people who were the same as me, I wouldn't have made much difference, but now I can see what [...] I can contribute*" (BM6 Y2). Although identifying as B.A.M.E. is not a WP entry-criteria, benefits relating to increased ethnic and cultural diversity were often highlighted as rewards of WP at the UoS. For example, some participants drew on a cultural competency model of diversity[120]: one BM6 student described her personal experiences and insights about South Asian culture helped her to understand why there might be increased risks for particular health conditions for patients from this group, and how aspects of culture might also affect adherence to treatment. She believed her awareness of those cultural norms could aid rapport building and create a shared understanding with such patients that might facilitate more positive health behaviours (BM6 Y2). Such discussions often prompted focus group participants to express concerns about the inherent risks associated with this approach in healthcare, and many described drawing on a model of cultural humility[120] when working with patients from diverse cultures. They described that learning about other cultures from fellow students was transformative in helping them to realise the extent of what they *didn't* know, and promoted the importance of avoiding making assumptions about other cultures based on such insights.

7.3.3 University of Aberdeen

Understanding of WP and diversity

At the UoA, WP was mainly discussed in terms of widening ***access*** to university by mitigating some of the psychological, social and financial barriers posed by the current application systems: "*a lot of widening access work just focuses on getting them here, maybe not so much supporting them whilst they're here*" (AS). This reflects the structure and institutional messaging about G2M identified in Chapters 5 and 6. Metaphors like "*jump through the hoops*" (of the medical school application) signal

perceived systemic barriers to medicine, attributing some responsibility for inequality to the university or professional institution. Many participants critiqued the medical application system, acknowledging its role in creating and perpetuating barriers for SURGs.

However, G2M students in particular protected the meritocratic system, and discussed how the G2M programme aligned the value of WP with the need to maintain high standards among medical applicants: "*It's a way of doing it without just letting anybody in, because obviously there is a shortage of doctors, but you can't just let people be doctors just because we need more*" (G2M Y2).

WP was also seen as necessary for increasing recruitment of students from rural and remote areas of Scotland, for whom several educational, cultural and psychological barriers were identified, including not having the "*opportunity to study the correct subjects to get into Medicine*" (Non-G2M Y2). One student noted that many students from rural or remote backgrounds had to "*teach themselves about Higher Chemistry, form textbooks. And I would say that that is [...] just a straight up disadvantage to people who come from the Islands*" (Non-G2M Y3). G2M students had observed a lack of "*motivation to do, to leave, or aspire to do anything*" (G2M Y2) among their peers at home, creating a cultural expectation that people from the remote islands should remain there. Moreover, or perhaps consequently, perceived role models and visible options for work and further education were "*so limited*" for students in those areas. In these discussions, WP was commonly presented as a one-sided "*opportunity*", insinuating that only gateway students would benefit from their medical education, evoking the social justice and social mobility discourses.

However, some groups discussed the bi-directional benefits of increasing diversity through WP, particularly of targeting students from rural, remote or socioeconomically deprived communities: "*if you have students that have come from the rural areas, they are more likely to go back and practice in those rural areas, and that's definitely a need that many of those communities have*" (Non-G2M Y2). Similarly, UoA participants felt that students who had not grown up with privilege would not choose to work in those areas after graduating, "*I don't want to sound like classist or anything, but I don't really know how to put it, but people who generally don't come from that sort of world don't really want to go back into it either*" (Non-G2M Y3). The expectation that these students would return to their communities to practice was criticised by and uncomfortable for TS: "*I don't think we should train doctors from inner-cities to go back to inner-cities [to]*

be empathic, I didn't come from an inner-city, I hope I could be an inner-city doctor and be empathic and do the things that I needed to do and [understand*] local things*" (TS).

Perceived differences

Medical school staff at the UoA observed that many gateway students were initially less confident than their non-G2M peers, sometimes requiring significant support during the G2M year, "*some of them are quite high-maintenance*" (TS). Former G2M students described how the G2M year "*gave you the confidence to kind of go over and speak to other people*" (G2M Y2) when they progressed onto the full medical degree, helping them to "*make new friendships*" (TS).

Integration

When G2M students studied alongside their direct-entry peers, perceived differences between students from different backgrounds were uncommon, and less likely to impact on social interactions, "*people are more focussed on the fact that you're there, rather than how you got there*" (G2M Y2). This was attributed to the G2M programme design, "*We wanted them to be integrated, so, that's why we make them have an* [application] *interview, we make them sit UKCATS* [UK medical school entry exams, now called UCATs]" (AS). Former G2M student participants concurred: *"we're not set aside in any way, we're all in the same boat*" (G2M Y2). Students from different backgrounds were well-integrated within the medical school. Where students did experience discrimination, they reported that this exclusively occurred outside of the medical school (one Asian participant experienced racial discrimination in her university accommodation, while two participants shared experiences of racial and gender discrimination from patients during placements).

Benefits of diversity

All UoA participants groups were advocates of WP. They identified numerous positive outcomes of increasing diversity through WP, like enhancing awareness of different backgrounds and helping all students "*to empathise* [with patients] *based on the diverse range of backgrounds of everybody involved in learning*" (Non-G2M Y3). All groups suggested that learning with a diverse cohort facilitated superior development of skills vital for success in medicine such as improved communication, as "*you start learning there's not just one type of person, and you start to learn how to communicate*

around that, and adjust." (G2M Y2). Most groups discussed the value of having perspectives from students from rural and remote or low-income backgrounds included in the classroom.

Teaching staff also emphasised the opportunity for the institution to benefit from WP students' perspectives and the novel insights they could bring, as well as being an opportunity for the students: "*I can prove to you by my experience, brilliant minds could be lost, because they don't have any opportunity to prove how good they are, simply because they come from a specific postcode, or bad school*." Diversity was heralded as a "*contribution to this culture made by people coming from different background*" (TS), positioning WP as a valuable tool for adding value to the institution.

G2M and rural students were described as having superior communication skills than students who had grown up in a city. Due to small population sizes, rural students described interacting with a diverse range of people, out of necessity. Consequently, "*you might be really good at talking to different types of people and not just a group of people just like you, which obviously is a big thing being a doctor*" (G2M Y2). 'City' students were described as having limited interactions with others who were different, primarily experienced in interacting with others 'like them', which might make building rapport with diverse patients difficult: "*cities can be quite like, keep to yourself, not really kind of getting out into the community and talking people. So, that's a huge advantage* [of being rural]" (G2M Y2).

Although participants generally felt that "*we gain a lot from having different cultural perspectives*" (TS), many also critically discussed the extent to which integration facilitated understanding: "*Maybe there's a mix of people, but that doesn't necessarily mean a mix of people are understanding each other's lives*" (Non-G2M, Y1). Similarly, some argued that having a better understanding of a patients' background should not affect a doctors' ability to provide excellent care: "*Does the person who is treating you have to actually know exactly what your experience is?*" (TS). Others felt that learning from others from diverse backgrounds did not need to involve explicit communication or interactions between diverse students: "*you probably subconsciously pick up on these things more than we think*" (Non-G2M Y3).

Alternative methods of exposing students to different lifestyles and cultures, such as an 'immersive' experience of teaching in a socially deprived school, were described as being more powerful and transformative strategies for increasing understanding and empathy of the impact of living on a low-income than was possible from interacting with

LSES students: "*They come out with, "I didn't realise actually some people in Secondary school can't read", or "I didn't realise actually that the staff had to make sure they brush their teeth and were fed at lunchtime" [...] I think some people from backgrounds that we have, just did not realise some of the difficulties that people have*." (TS).

Moreover, some participants suggested that the "*university moulds your confidence into what they want from you to come out the other end*" (Non-G2M Y3), implying that differences between students upon arrival could be minimised through processes of standardisation that studying at medical school entails[97].

7.4 Discussion:

Unless otherwise stated, the findings reported in this discussion refer to data generated and analysed from the focus groups (rather than data from Chapters 5 and 6).

Analysis of the focus group data shows that SURGs' senses of belonging, value, and inclusion differed in the two medical schools. At the UoS, students on BM5 and BM6 were perceived, by all participants, as different. BM6 students did not initially integrate with their BM5 peers when they joined Year 1, preferring to socialise with other BM6 students. Nonetheless, the different perspectives and personal qualities contributed by diverse students were valued. Integration increased throughout the medical school journey, and all participants continued to benefit from BM6 students' perspectives and contributions. At the UoA, G2M students experienced equality and belonging (p133) when they entered the standard-entry medical degree programme, but some participants felt that some qualities were 'moulded' during medical school. All participants valued contributions to education made by SURGs, but some questioned the *necessity* of their inclusion to optimise the learning environment.

7.4.1 Integration vs assimilation

These findings of this study aligned with Shore's framework, revealing an interplay between feeling a sense of belonging and a sense that uniqueness (difference) is valued (see figure 1 above)[191]. BM6 students at the UoS initially experienced Differentiation (high value in uniqueness but low belongingness) which then evolved to Inclusion (high belongingness and value in uniqueness) as they progressed through medical school. Although G2M students felt belongingness in the medical school, few participants perceived differences (or 'uniqueness') between students from different

backgrounds, and some participants from the UoA questioned the extent to which integration helped to improve the learning environment, and others described processes of Assimilation (high belongingness and lower value in uniqueness)[191].

BM6 students began their medical student journey in Differentiation: their perceived differences in relation to their cultural insights and personal qualities were described as "enriching" by BM5 students and staff, but the data also revealed some instances of academic stigmatisation. One member of staff assumed that BM6 students would 'struggle', and both staff and students discussed the implications of BM6 students needing to re-sit a year; a concern which was never raised in relation to BM5 students. This suggests that the concerns raised by medical school Admissions Deans that SURGs may be less academically suitable for medicine[181,184] pervade into the classroom, with potentially troubling implications for SURGs learning[21]. The analysis of the BM6 webpages presented in Chapter 6 showed that the academic successes of BM6 students are celebrated and promoted by the institution, challenging the deficit discourse (p101). However, this focus group finding suggests that messages about BM6 students as capable may not be strong or visible enough to mitigate the deeply entrenched perception of SURGs as less academically able.

7.4.2 Social attachments and communities

BM6 students often formed exclusive social attachments with their BM6 "*family*" (p129) during the early years of medical school. Woolf et al. (2012) found that Year 2 medical students at a London university generally formed friendships with peers of the same gender and ethnicity[114]. Similar findings can be observed outside of medicine, where 'non-traditional' university students form 'communities' with other students from underrepresented backgrounds in terms of class, age and ethnicity[31,110]. Such friendships are thought to provide understanding, comfort and belonging for students whose identities fall outside of the dominant 'culture' of students who are more likely to access HE[31]. BM6 students are from socially and educationally disadvantaged backgrounds, and there is representation of a wide range of ethnicities on the programme; their closeness may reflect a commonly observed preference for socialising with others 'like me' to facilitate in-group (BM6) rather than institutional belonging.

A preference for forming 'communities' may highlight or draw attention to differences between BM6 students and their BM5 peers that might otherwise be more subtle in a mixed group, and may explain why many of the valued differences pertained to

ethnicity or ‘culture’. The findings relating to ‘perceived differences’ at the UoS may also be partly explained by gateway programme design. As the BM6 programme is a 6-year programme, many students develop a “BM6 identity”, which continues with them beyond Year 0. While there are likely to be benefits to retaining their attachment to the programme, it can signal difference to others[71]. At the UoA, former G2M students are no longer identified as such once enrolled onto the 5-year programme and are perhaps consequently less recognised as ‘different’.

UoA participants described a well-integrated medical student cohort and G2M students expressed a sense of belonging. Participants reported few perceived differences between G2M and non-G2M students, suggesting that their uniqueness was less recognised. This aligns with the philosophy about WP implied by the programme structure and promoted on the G2M webpages: that the purpose of G2M is to prepare students academically and socially to access university. G2M students enter medicine through the same route as direct-entry students, implying an institutional belief that the differences students experience before university will not continue to impact them after enrolling onto the standard entry degree (see Chapter 6).

The successful integration of former G2M students could reflect the G2M eligibility criteria. Some G2M students hail from rural or remote Scotland, and are not necessarily from socially disadvantaged backgrounds (although many are) and may share more similar pre-university experiences with their peers. BM6 students, on the other hand, may have fewer experiences in common with their BM5 peers before university, leading to the perceived lack of relatability. The shared experiences of progressing through the early years of medical school together support students to perceive each other as more similar, and facilitates integration over time. As data were not available on ethnicity of G2M, it is unclear whether visible differences contribute to perceptions of difference at the UoA.

7.4.3 The impact of capital

Brosnan et al. interviewed underrepresented Australian medical students, predominantly in Years 1-3 of medical school, and reported their participants encountered barriers to connecting with more “traditional” students[63]. They examined their findings within Bourdieu’s theory of habitus[118], and theorised that differences in social, economic and cultural capital inhibited integration. Rural and remote G2M students may possess similar forms of capital to non-G2M students and share common identities and experiences, facilitating the kinds of close bonds often identified between

medical students[107,200]. BM6 students, however, must meet some criteria relating to socioeconomic background, and may perhaps experience greater 'social distance' (perceived discordant social characteristics)[201] from some of their BM5 peers, which may partially explain their initially limited integration.

Students from WP backgrounds bring novel and valuable forms of capital with them into medical school, but they are not always valued or recognised within typically middle-class institutions[25,62,63,181]. Participants in the UoS focus groups valued some of the cultural knowledge of BM6 students, discussing how such insights could support their development of cultural competency and cultural humility (e.g., see discussion of one participants' understanding how some aspects of South Asian cultures led her to believe she could provide excellent and sensitive healthcare to patients from similar cultural backgrounds, p106), but BM6 students did not express a sense of belonging to the wider medical school in their early years of study suggesting that difference can be valued and embraced, but this is not sufficient to facilitate belonging. It is unclear from these data whether the perceived value of diversity is explicitly communicated to BM6 students rather than held as an implicit assumption; some BM6 students reported feeling academically stigmatised in their early years. This could affect belongingness.

7.4.4 Belonging and identity

A sense of belonging to an institution or course enhances WP student progression and retention at university[202], and research has identified that BM6 students who progress into Year 1 have slightly lower rates of programme completion than their BM5 peers[80]. Medical SURGs often describe feeling out of place, like imposters, and experiencing stigma or discrimination in medical school[34,62,63,203], which can contribute to higher rates of attrition and impact academic performance[203]. G2M students in this study, however, accepted that they were as deserving of a place in medical school as their non-G2M peers and felt equal to them (133). Their experience of equality as a medical student could explain the quicker integration of G2M students in the UoA medical school, and it could also protect them from a range of adverse outcomes associated with feeling unequal in HE that can contribute to higher rates of attrition and impact academic performance[34,62,63,202,203].

Professional identity research suggests that medical students' acceptance of professional norms aides a sense of belonging[204]. The G2M programme design, a year-long programme after which students must successfully apply onto a traditional-entry medical degree programme, may have a positive effect on students' identity as a

medical student and subsequent sense of belonging to the medical school. This could be further aided by the paid work experience undertaken by many G2M students, where they may have more clinical responsibilities than BM6 students who undertake observation-based placements in Year 0. This work experience and involvement in the field may contribute to an earlier acceptance of the cultural norms of medicine for G2M students, which may also explain how students were Assimilated[191] in the medical school. Professional identity development may also help to explain why BM6 students at the UoS experienced an increased sense of belonging as they undertook more clinical placements in their third year, becoming more involved with the medical profession.

At the UoA, G2M students described themselves as possessing a strong sense of belongingness, and this was echoed by staff (p133), but less value was attributed to the uniqueness of diverse students. While all UoA participants did value diversity, some felt that the university "*moulded*" students, signalling an institutional requirement for Assimilation, or conformity to the cultural norms of the profession[63,97,191]. Frost and Regher posit that a tension exists between desires for both diversity and standardisation at medical school[97]. They argue that navigating this conflict can adversely impact the professional development of 'diverse' students striving to be viewed as competent within a narrow construction of the "***right*** *kind of physician*"[97(p1570)], causing diverse students to minimise or downplay their unique attributes. The UoA focus group findings may be explained by this theory, and they also illustrate how this tension can impede inclusion (as defined by Shore and colleagues[191]). Further research could develop these insights and examine the extent to which inclusion impacts attrition and attainment in gateway students.

As I argued in Chapter 6, universities should reflect on the institutional beliefs about the purpose and value of increasing diversity through WP, and ensure that these are widely promoted. The findings of this focus group study support this argument, suggesting that medical schools must be more intentional about ensuring the goals of inviting students from different backgrounds to study medicine, such as enhancing cultural awareness among all students, are achieved. Can medical schools put a diverse group of students together and expect understanding and awareness to be shared organically (and unconsciously)? Or should this be facilitated sensitively and respectfully through thoughtful, decolonised pedagogy?

Reflexivity training can support all students (and staff) to reflect on their own, and others, multiple, intersecting identities and life experiences, and consider how these

affect their teaching and learning experiences, as well as patient interactions. This could support students to recognise their unique identities and potential contributions to medical school and to the profession, which could not only build self-esteem but support participation and engagement with these issues within and beyond the classroom. Moreover, medical educators must do more to embed inclusivity into medical curricula, to ensure that the potential rewards of diversity in the classroom are recognised, and opportunities to learn from them are baked into everyday practices.

7.4.5 Benefits of diversity:

Despite differences in perceptions of SURGs and their integration in medical school classrooms, all participants reported very similar perceived benefits of increasing diversity through WP. In accordance with the dominant social mobility discourse for WP in the UK[2,72], participants felt WP was important for supporting individual SURGs to become socially mobile by entering the medical profession and the potential for this to improve doctor-patient concordance[122], and create role models for a students from a wider range of backgrounds to 'see themselves' in the profession. Participants noted several benefits of increased diversity for the learning experiences of all medical students which are absent from most public discourses about WP in medicine[72], including the UoS and UoA gateway programme webpages (p111).

Participants reported that interactions between WP and non-WP students:

- **Bursts Bubbles:** challenges taken-for granted worldviews, stereotypes and ways of thinking
- **Enriches all student learning:** through cultural knowledge exchange and diversifying curricula
- **Enhances cohorts' soft skills:** communication, teamwork and problem-solving with 'Others'
- **Facilitates recognition of own strengths:** seeing differences enables students to appreciate their unique contributions to medicine

Acknowledging and embracing these outcomes of increasing diversity through WP is a crucial if institutions wish to attract, retain and benefit from a diverse cohort which represent and can provide excellent care to our multicultural patient populations, and to create education environments in which *all* students can thrive.

7.4.6 Limitations of this study

Using focus groups enabled a broad range of perspectives to be captured. However, participants are more likely to offer socially desirable responses in focus groups than in individual settings[141]. This may be a particular issue when discussing potentially sensitive topics like diversity, especially when participants represent a profession requiring commitment to principles of equality and inclusivity. This may partially account for the lack of perceived differences described by UoA participants and the absence of any negative perceptions of WP, diversity and 'difference', although the UoA findings demonstrate that at least some participants felt comfortable critically appraising these topics.

Some of the focus groups also included small numbers of participants (2-4), fewer than the number recommended by Braun and Clarke for a 'good' focus group[140]. This limited the range of possible perspectives that were shared for some participant groups (such as the staff). However, the premise of case study research is to *illustrate* with data, rather than generalise, so I proceeded to run the smaller focus groups and decided to review the data before deciding whether to include them. I found that these smaller group sizes often facilitated wonderful dynamics between participants compared to the larger groups; participants in smaller grounds tended to engage in much richer and deeper conversations, while those in larger groups rarely stayed on one topic for long. I have included a critical reflection on one such conversation in appendix K (p323).

This was a small study; some of the voices which might have provided further insights are not represented here, such as students in later years and clinical teaching staff. It would also have been interesting to differentiate between BM5 and non-G2M students who met the gateway programme WP criteria and those who met no WP criteria, to explore whether programme membership or other social factors contribute to differences in perceptions. This was beyond the scope of the present study, but it is highly recommended for other gateway programme studies.

Finally, I acknowledge the potential for comparing these findings with similar data from a medical school that does not currently offer a gateway programme. Such findings could provide valuable insights into the impact that investing resources into and running a gateway programme exclusively for students from WP backgrounds has on perceptions of the value of WP, and on SURGs' experiences of inclusion and belonging.

7.4.7 Impact of this study

The findings of this research expand the existing knowledge about how increasing diversity affects the experiences of medical students. It offers a different perspective on the impact of WP by examining how WP is perceived by a range of individuals involved in the medical school, rather than focusing purely on academic outcomes or the individual experiences of SURGs. Participants strongly advocated for WP and perceived myriad benefits to learning from the resulting diversity. Such findings help to shift the narrative about WP from a deficit discourse to one that "valorises a diversity of life experience and skills" needed to provide healthcare in a multicultural society[10].

This study also increases our understanding of gateway medical students' experiences. By comparing experiences in two medical schools in relation to the medical school contexts, we have shown that features of the gateway programme such as the structure and WP criteria employed impact gateway students' experiences of belonging and feeling valued in their medical school, which have implications for attainment and attrition[205]. Reflecting on these insights may particularly benefit those considering or preparing to implement a gateway programme at their medical school.

7.5 Conclusion

All participants described valuable contributions that SURGs make to the learning environment, including novel insights and perspectives brought to the classroom, and the opportunity for enhancing communication skills. However, BM6 participants also described experiences of academic discrimination, and UoA participants questioned the practical use of cultural knowledge exchange in practice. Medical educators should reflect on the aims and their desired outcomes of increasing diversity through WP, and ensure this is captured in both the language they use to talk about WP in personal and public discourse, and consider whether the desired outcomes can be illuminated and facilitated through their curricula. Highlighting the value of WP will add to the increasing pressure for institutions to bravely and critically examine their current practices, to identify whether the needs of SURGs are being met.

These findings also indicate that gateway programme design and institutional contexts influence SURGs' experiences of inclusion throughout their medical school journey. This demonstrates the value of bringing to the surface often 'hidden' aspects of institutional contexts which shape experiences relating to WP.

Reflecting on and presenting an authentic and evidence-based case outlining the institutional aims and outcomes of increasing diversity through WP may help institutions to recognise and realise the potential rewards of a diverse medical classroom.

7.5.1 Summary of key differences between the two cases:

University of Southampton	1495 UNIVERSITY OF ABERDEEN
Emphasis on perceived differences and lack of integration 'Homophily'[7] • *Support and protection of cultural identity* Gateway programme structure (6-years) • *"Family"* → Magnify differences and reduce belonging	**Limited perception of 'difference' and G2M well-integrated** WP entry criteria – rural / remote • *Less 'cultural and symbolic distance'*[8] Gateway programme structure (1+5 years) Earlier immersion in professional culture of medicine • *Belonging supports retention and attainment*
Inclusion From differentiation → inclusion • *Valuing difference is not sufficient for inclusion* Greater potential to benefit from uniqueness	**Assimilation** Tension between desire for diversity and standardisation[9] • *Students may minimise or downplay their unique attributes*

Chapter 8 Legitimising Difference: A narrative exploration of how interactions with students from different backgrounds affect experiences of medical school

8.1 Background

The potential rewards of a diverse classroom include enriched medical education[85,88,89,132,133] and improved healthcare provision in terms of both quality of care[122,135] and access to quality care[83,84,123,130]. These outcomes were recognised by focus group participants, who perceived SURGs as contributors of cultural wealth to the UoS and UoA medical school communities. However, most UoS participants interacted infrequently with students from different backgrounds, and many UoA participants questioned how much a second-hand understanding of a different lifestyle could, or should, affect healthcare provision. Few participants at either institution gave examples of interactions that led to the beneficial outcomes of increasing diversity through WP which they described. It was therefore unclear *how* these benefits were realised.

Continuing the journey of this thesis in exploring diversity through discourses, perceptions and experiences of widening participation in two UK medical schools, this chapter addresses the third research question:

3. *How can interactions between students from different backgrounds influence students' experiences during medical school in the contexts of the UoS and UoA medical schools?*

Narrative methods can be used to explore how certain events or interactions are experienced by individuals and, by considering each individual's context, provide insights into why those events are considered meaningful and are interpreted in particular ways. For example, Marshall and Case present a powerful, paradigmatic case of an Engineering student, Mandla, who achieved success at university after experiencing severe 'disadvantage', including extreme poverty and becoming a caregiver to his siblings after they were orphaned at a young age[103]. Through their analysis, Marshall and Case revealed how Mandla's qualities such as leadership and a desire to 'give back' to his community (which Mandla developed during childhood) were

mobilised as resources during university. Contextualising Mandla's current experiences against his background greatly enriched the understanding of how Mandla perceived his university experiences and the choices he made. Their findings provide insights into how university curricula and support services could be improved to support students from diverse backgrounds to flourish at university.

I therefore chose narrative interviews and analysis as the methods to answer this research question.

8.2 Methods

8.2.1 Data type and collection: narrative interviews

Generating stories as data seemed most appropriate for this study as the features that characterise a 'narrative' were all relevant to the research aims. Stories contain 'plots', which focus on particular events or interactions that are considered to have an impact, and which often represent transformation or change. Narratives (arguably) require temporal situation, a before, during and after, that help to identify and understand the impact of experiences[141]. Narratives also include an exploration of characters and contexts[141], both important elements for my case study research design.

Narrative methods align with constructivism, foregrounding the role of the researcher in the co-construction of narrative data[206,207]. Salmon argues that: "*all narratives are, in a fundamental sense, co-constructed. The audience, whether physically present or not, exerts a curial influence on what can and cannot be said, how things should be expressed, what can be taken for granted, what needs explaining, and so on*"[208]. Unlike several qualitative methods (like TA) which de-contextualise data from the interview setting, narrative analysis is a holistic approach which acknowledges interactions between the interviewer and participant, making analysis more transparent.

Perhaps for this reason, another guiding principle of narrative interviewing is to minimise the active involvement of the researcher during the interview. Researchers must ask open-ended questions then "give up control" and listen attentively[206], offering participants an opportunity to speak freely as often as possible and share what they believe to be meaningful[207] rather than being guided by the interviewer. This is an ethical form of data collection, encouraging greater equality between the participant and interviewer than more structured frameworks permit[206], which can facilitate unexpected and novel discoveries.

Participants' stories often include "thick descriptions" of characters, situations and contexts[141], generating large quantities of data that can be difficult to manage and analyse. A small number of participants is therefore recommended. Neither narrative research nor case study research are undertaken to produce generalisable findings, preventing the small number of participants from becoming a study limitation. However, researchers must devote significant time and employ a high level of skill and rigour to the analysis, making narrative methods challenging for a novice researcher.

8.2.2 Participants and recruitment

As focus group participants indicated that clinical placements enhanced integration of students from different backgrounds, I sought participants with some experience of full-time placements (in Years 3, 4 or 5 of their medical degree programme).

UoS participants

I sought four participants from the UoS; two studying on BM6, and two enrolled on BM5 who did not meet any of the BM6 WP eligibility criteria. This would allow me to compare the findings between students from WP and more 'traditional' medical backgrounds. Eligibility criteria are outlined in the ethics application form, which is in appendix L, alongside all other relevant ethics documents (p327). I received ethical approval to conduct the study before approaching prospective participations.

Adverts were issued in the MedSoc student bulletin and on the official UoS Medical Education Twitter page, asking interested students to contact me by email for further information about the project. The adverts for BM5 and BM6 students can be seen in appendix L.

UoA participants

A further four participants were recruited from the University of Aberdeen (UoA) medical school based on similar criteria: two who had completed G2M and two who had not, and did not meet the G2M entry criteria.

Conditional ethical approval was granted by the chair of the UoA ethics committee before final ethical approval was received from the UoS ethics committee as an amendment to the UoS application. A senior member of the Aberdeen medical education faculty acted as a local Principal Investigator (contact) to support with recruitment and help to manage any issues that might have emerged.

Posters were advertised on UoA social media sites; a similar procedure was followed in terms of communications with interested students.

8.2.3 Interview procedure

I responded to all interested students with a brief outline of the study, a Participant Information Sheet and asked them to confirm that they met the eligibility criteria. The email also invited them to ask questions about the project. I selected participants from the eligible pool using a random number generator.

Participants chose a time for their interview, and I sent a confirmation email with the meeting link. I sent an email reminder about the interview 1-2 days before each interview, which included the main research question and invited participants to think about stories they might like to share. Participants were required to send a completed demographic form and consent form before the interview began.

I conducted the interviews myself, which is recommended by Riessman, as the "*interpretive process beings during the conversation*"[206 (p26)]. Due to the restrictions imposed by Covid-19, interviews took place virtually via Microsoft Teams, which is used by the universities and therefore familiar to the participants. Interviews took place from June-December 2021, by which time students had used distance learning for over a year and were therefore considered to be familiar and comfortable with online interactions[209], which can be more informal and reduce the "*pressure of presence*" that participants can feel in a face-to-face interview[210].

I invited participants to use their webcam, and kept my own on so that we could both observe body language and facial expressions[211]. I reminded participants that video data would automatically be collected if they kept their webcam on, but would not be used for analysis. Two participants turned off their webcams.

The interview framework is in appendix M (p343). I used a broad opening question that would allow participants to speak freely, with minimal interruptions from me[206]. I provided prompts on the screen for guidance. Once participants had indicated that their main story was complete, we had a 10 minute break from the interview while I prepared follow-up questions about particular aspects of their story[212]. I wrote in my journal about

each interview experience; some examples are included in participants' interpretive stories.

8.2.4 Data analysis

I transcribed the narrative interviews myself, including non-verbal elements of the storytelling, such as pauses and false-starts, permitting an analysis of *how* participants spoke. A segment of an anonymised transcript with some initial analysis is in appendix N (p347). A key for non-verbal transcript features is presented at the start of the results section (Interpretive stories).

I sent transcripts and my initial interview summaries to participants, including my early interpretations, to provide them with an opportunity to confirm, clarify, or amend any aspects. Most participants were happy with the summary; two requested minor changes to secure anonymity of themselves and the students discussed in their stories,

Although narrative researchers are encouraged to make use of the wide range of analytical frameworks, such as discourse and TA[213], narrative analysis should not merely be an 'analysis of narrative'. The object of narrative analysis is the whole narrative rather than decontextualised, fragmented units. All analysis must be situated within the participants' wider narrative in a hermeneutic circle. Researchers must also consider relevant personal, social, historical and cultural contexts that mediate the participants' story[214]. As Erben suggests, to explore phenomena outside of their contexts is to impoverish interpretation[214].

I opted to use McCormack's framework which prompts the researcher to rigorously analyse their narratives using multiple lenses[215-217], including consideration of structure, language and context. McCormack sought to guide novice narrative analysts through the complex, messy and underreported process of moving from transcript to analysis, ensuring high-quality and credible findings could be produced. Analysing data through multiple lenses "highlights both the individuality and complexity of life"[215], and is an approach which McCormack describes as ethical and accountable (p284). Although McCormack does not explicitly define what she means by an "ethical" approach, she describes at length the ethical implications being actively open to multiple interpretations of data, consulting and cocreating findings with participants and the transparency embedded into the process through reflection and inclusion of long quotes from the data, which include the interviewer's input, rather than decontextualising short phrases.

Data analysis begins with actively 'listening' to the narratives, noting key events, and considering the impact of the interviewer in the conversation. Researchers then 'locate stories' within the whole narrative (bounded and linked sequences of events with a beginning, middle and end). Each 'story' and the wider narrative are then analysed through four lenses:

Narrative processes

Analysing through the lens of narrative processes is done in two ways. Firstly, it involves a Labovian-style structural analysis, where researchers examine *how* stories are structured, identifying phrases that function as:

- **Abstracts,** which summarise the point of the story
- **Evaluation**, which explain why the story was told and the participants' reactions and judgements
- **Orientation**, providing details about who, what, when
- **Complicating actions**, the series of linked events that answer 'and then what happened'
- **Coda**, which bring the story to a close[206].

The evaluation and the abstract explain why the story was told, and become the title (or subtitle) of the story[215]. Each participant's main story title and subtitles are quotes from the transcripts which I felt captured the key points of their main stories and subplots.

Secondly, phrases are examined for other functional narratives processes which enrich the story and help the listener to understand the point of the story:

- **Theorising:** where the speaker becomes reflective, tries to work out "why" or understand something
- **Augmentation:** Where the speaker adds information to the story already told as the conversation stimulates recollection of additional story pieces (add detail relevant to the story)
- **Argumentation:** where the speaker adds details from outside the story to help the audience interpret it
- **Descriptions:** where the speaker describes particular people, places, or things in detail

Unusual structural patterns are examined for effect.

Language

This second dimension involves examining how language is used by participants in terms of content (what is said) and function (how it is used to construct individual identity and social relationships between people and systems of knowledge and beliefs). Linguistic patterns, such as changing use of personal pronouns or a prominent group of words within a semantic field, are analysed for their effects.

Context (situational and wider)

Two types of contexts must be considered and explored in relation to the data: the context of culture and the situational context.

The context of culture refers to social, political, cultural, historical and structural conditions of the wider society in which the participants' stories have been lived, told and retold. 'Cultural fictions' (dominant, collectively held discourses) present in narratives are examined in relation to participants' acts of accommodation, challenge or resistance. Influential social structures and discourses can be 'silent' during interviews, but can be identified through examining the history and biography of the participant, and the society they inhabit[218].

The situational context is the context in which the data was produced: the interview, which is a conversation constructed jointly in a "*relation of power, at a particular historical moment*"[219 p31]. This includes the questions that were asked and how the participant responds to them (e.g., the length of response, pauses or hesitations). It also includes the personal context, the autobiographical context that each person brings to the interview.

'Moments'

'Moments' can refer to participants' stories about a transformation or change, akin to Denzin's 'epiphanies' or 'turning points'[220]. However, 'moments' can also include unexpected or interesting segments of the interview conversation such as a change in tone, a realisation or strong expression of emotion. As Denzin suggests, these moments can alter the shape and meanings persons give to themselves and their life projects[220(p510)].

Interpretive stories

The final stage is to organise the data and analysis to produce comprehensive, individual "interpretive stories" for each participant which highlight areas of interest suggested by the lenses while preserving the context in which narratives were spoken, performed and heard[216]. Interpretive stories from each participant are initially presented as whole units (rather than being broken up and presented in segments or themes following cross-case analysis, as in other narrative approaches).

Examples of interpretive stories can be found in McCormack's own work on female PhD students' experiences of leisure[215-217], in Marshall and Case's study[103], and in diverse topics such as management development programmes[221], experiences of withdrawing life-sustaining health care[222], and experiences of lesbian parents[223].

8.3 Interpretive stories

As analysis include a linguistic component, some non-verbal features of the interviews are presented symbolically in the quotes provided; these are presented in table 7 below.

Symbol	Denotes
CAPITALS	Speaker emphasised word
@	Laughter
-	False start
(.)	Pause of less than a second
(1)	Pause for that number of seconds
Emboldened quote	Something that I, the researcher, wish to draw the reader's attention to

Table 7: Representation of non-verbal features of the interviews

8.3.1 Participants and narrative summaries

Four UoS students participated in narrative interviews, which lasted between 54 and 63 minutes. A brief overview of their stories is presented in table 8 below.

Participant pseudonym, programme and year of study	**Story title**	**Summary of narrative:** ***How have interactions with students from different backgrounds influenced their experiences of medical school?***
Sade (BM5 Y3)	"It ends up not being as big as a deal as you might think it would be in the beginning"	A Black student from London, Sade "*felt like a minority*" when she arrived at the UoS, compared to how she felt at home Learning about other types of diversity and difference through placements and societies helped her to recognise 'Other' students are "*at your same level*"
Rishi (BM5 Y4)	"I kind of got the sense that I **had** the university experience"	Rishi, a mature student with caring responsibilities, felt anxious he would not 'fit in' or have a 'proper uni experience' Befriending and seeing success in students with similar attributes helped him to identify as a medical student with a valuable contribution to make
Tariq (BM6 Y4)	"You hear from other students about (1) what that's like from the other side"	Interacting with more privileged students highlighted educational inequalities in society Hearing how more privileged students talked about mental health transformed understanding about its significance in medicine Tariq shared novel cultural insights with other students based on his background
Aaliyah (BM6 Y5)	"There was kind of these snide remarks"	As a "*minority within a minority group*", Aaliyah experienced religious and academic discrimination at the UoS She used many strategies to process the incidents, but felt frustrated and disempowered by them

Table 8: Summary of UoS participants and their narratives

BM5 participants (Sade and Rishi) do not meet BM6 eligibility criteria but come from backgrounds underrepresented in medicine. I reflect on and discuss the impact of this in relation to my research aims in the 'Participants' section of the discussion.

Four UoA students participated in narrative interviews, which lasted between 45 and 74 minutes. A brief overview of their stories is presented in table 9 below.

Participant pseudonym, programme /year of study	**Story title**	**Summary of narrative: *How have interactions with students from different backgrounds influenced their experiences of medical school?***
Niall (Non-G2M Y4)	"You started to look at each other as friends, as whole people, and then you look at patients (.) look at them as a whole clinical picture"	Niall expressed a struggle to reconcile becoming socially mobile through classes as his parents moved him from a state to a private school. At university, he was discriminated for working-class accent. He became frustrated by lack of understanding and empathy expressed by some privileged peers Over time, he learned to accept their differences and work alongside them, improving his skills as a practitioner
Mairi (non-G2M Y3)	"I think it would be useful, um-more useful (1) If each (1) kind of (.) medical schools set kind of certain standards"	Mairi was from a rural and low-income background, she was shocked to learn how different some of her peers' life experiences were. She became frustrated that their lack of insight into living on a low-income perpetuated social inequality in medical school. She joined a medical society committee, and became an advocate for low-income students
Priya (G2M Y3)	"It is nice to know that people have little things that you could kind of add to them"	Perceived direct-entry students as perfect "superhumans", while perceiving her own place as a medical student as a "mistake" Befriending a "superhuman" and seeing her make mistakes highlighted Priya's strengths and value to medicine, increasing her sense of legitimacy

Maduka (G2M Y3)	"I think (2) It has made me realize I have more options"	As the only Black student in his secondary school, he lacked a sense of belonging and didn't participate in extracurricular activities. At medical school, more privileged students normalised and inspired him to participate in activities. Trying new activities boosted his confidence and skills, and further broadened his perspective.

Table 9: Summary of UoA participants and their narratives

The non-G2M student participants, Niall and Mairi, also represent groups of students which are underrepresented in medicine.

8.3.2 Interpretive stories

Each participant's interpretive story is presented individually, beginning with some context about their background, pre-university experiences and expectations of medical school.

When comparing all narratives together, I identified 3 types of interaction between students from different backgrounds that influenced my participants' experiences of medical school:

The three main types of interactions, or situations, through which participants' medical school experiences were influenced by students from different backgrounds include:

1. **Observing Others' Worlds:** participants described their *own* backgrounds and contexts in detail, and how they gained valuable knowledge and insights from simply being exposed to (rather than having any notable interactions with) students from different backgrounds

2. **Unexpected Friendships:** participants described a valued friendship in rich detail, highlighting how they were different to their friend. They confidently described how their friend had shaped their experiences of medical school

3. **A Moment with an 'Other'**: participants described specific interactions which highlighted differences between themselves and students from other backgrounds which had affected their medical school experiences. Participants

had often reflected on the meaning of these interactions privately, but also used the interview space to develop their interpretations

As the main focus of my research question is about *how* interactions between students from different backgrounds influence experiences of medical school, I used these 'types of interactions to organise and categorise my participants' interpretive stories. Most interpretive stories feature one or two of their longer sub-plots, which illustrate these types of interaction. For example, from my narrative interview with Sade, I found a subplot about her observing other students to best answer the question of how students from different backgrounds had affected her medical school experiences. By foregrounding *types* of interaction (to address my research question of *how* interactions affect experienced of medical school), I have backgrounded other parts of participants' narratives; most participants shared more than one sub-plot and more than one type of interaction. However, I sought to respect and privilege as much of their narratives as possible within these constraints, and contextualise them within their unique journeys and experiences.

Another important aspect of "how" interactions with other students influenced participants experiences of medical school are the realisations or "epiphanies"[220] which students experienced following their interactions with others from different backgrounds: the mechanisms between the interactions and the specific and personal outcomes of these interactions on their experiences of medical school.

These realisations or epiphanies symbolise *why* particular interactions were selected by participants as relevant to my interview question, of having an impact on their medical school experiences, while other possible stories about their interactions with other students were deemed less relevant. I identified 3 epiphanies or realisations that participants following their interactions with students from different backgrounds:

1. **Increased awareness of difference:** participants described their *own* backgrounds in detail. Observing and interacting with students from different backgrounds helped them to recognise that they had previously been surrounded by people who were similar to them, and that they'd had limited exposure to diversity. Participants described learning about different lifestyles and contexts. Differences were often construed as making others unrelatable and were barriers to integration at this stage.

2. **Legitimising difference:** participants began to accept difference, even when they didn't understand it. Some learned from their interactions with others that their *own* differences from what they believed a 'Medic' *should* be were acceptable, and they realised that they could succeed in medicine. Other participants recounted negative interactions with students from different backgrounds, which they had initially judged, but described their realisations that these students were products of their unique backgrounds, and became more empathic and understanding.

3. **Bursting bubbles:** through interacting with other students, participants' strongly held beliefs were examined, challenged and often transformed. This often led participants to not only accept difference, but to value it.

I have indicated points in the interpretive stories where these realisations and epiphanies are apparent: all participants' stories illustrate at least two.

8.3.3 Stories which illustrate “Observing Others’ Worlds”

In this section, I present interpretive stories from participants Sade (BM5) and Maduka (G2M), which illustrate how exposure to students from different backgrounds provided them with insights and knowledge about other ways of experiencing the world that were different to their own (which they had previously taken for granted as the norm). These observations prompted reflection and transformed views about what was ‘normal’ for medical students and patients.

Although some interactions between students inevitably occurred which must have heightened their awareness of differences, neither Sade nor Maduka could identify any particular exchanges that were meaningful in catalysing the outcomes of diversity they discussed. Rather, both felt that they had learned from the cumulative effects of “*mostly little things*”. Sade and Maduka’s interviews included displays of uncertainty about the impact of interacting with students from different backgrounds: Sade’s narrative is full of theorising and questioning as she processed and made-meaning of her story through the reflexive journey of our interview.

Maduka’s interview began with long pauses, and he expressed uncertainty about what my question meant. His increasing confidence and clarity as our conversation progressed, and the sense of optimism and excitement for his future by the end of our conversation, reflect the importance of engaging in personal reflexivity for medical students. While their stories demonstrate that students *can* benefit from diversity through observation alone, guided reflections on their experiences within a culturally safe space can enhance their recognition and appreciation of what difference means for them as both individuals and future doctors.

8.3.4 Sade's story (UoS, BM5 Y3): "It ends up not being as big as a deal as you might think it would be in the beginning"

Sade, a female, Black African BM5 student, was in her third year of medicine at the time of our interview. She had grown up in the multicultural capital city of England, London, in which 'diversity' was the norm, as she described in rich detail. UoS medical students are predominantly White (see Chapter 5 subsection UoS National and local context) and many come from areas of the country with little diversity: "*not everywhere looks like London*". Sade's transition to medical school was challenging; cultural barriers to integration with culturally Other students, whom she described as "Medics", impacted her sense of belonging. Consequently, Sade maintained close friendships with her London school friends, although she was beginning to form friends with medical students in the student committee she was involved in.

Structural issues around race and ethnicity lurked in the background of our interview as the 'elephant' in the room, though explicit examples of racism are strikingly absent from Sade's narrative (I explore this in greater depth in appendix O, p350). Sadly, data on medical students' experiences of racism suggests that Sade probably has directly experienced racism in medical school[224,225]. Sade helped to develop a student committee which was established to bring minoritized students together, creating a safe space for students to discuss and reflect on difficult experiences and to address racial and ethnic inequities.

As Sade observed other medical students, her awareness of differences in lifestyles increased, recognising that her own experiences were unique rather than the norm. She became curious about other life experiences and worldviews, and reflected extensively during our interview about what those differences *meant*. She planned to apply these insights to her medical practice, suggesting she would be a more empathic and thoughtful clinician. As she developed a better understanding of other students during placements, she began to recognise the common experiences and ambitions shared between medical students, enhancing her belonging. She realised that the differences, which had seemed overwhelming and unnegotiable were rather interesting, and represented opportunities to learn.

Pre-university educational experiences: "I'm so used to like seeing different people that it doesn't really, faze me, as much"

Sade's understanding of 'different' backgrounds was geographic, and linked to culture: a different background, for Sade, entailed living in places other than London.

> **Heather:** *So, the question I'd like to kind of discuss with you today is- is for you- if you could tell me some stories about times when you've interacted with students from different backgrounds and how that's impacted your medical education*
>
> **Sade:** *I think that the first thing that would come to mind I think would be being from London: you have a very like, London-centric idea of@ life and where people come from, um, and I think coming to MEDICAL school and, like, doing placements with people who WEREN'T from London or came from somewhere else was actually quite interesting 'cause like people DO actually live elsewhere@, like not everyone lives in London, um, and kind of just finding out what life is like for different people.*

'London' seemed to be code for a fast-paced, diverse and cosmopolitan environment that she strongly felt facilitated her accepting and tolerable attitude towards difference. She expressed surprise that many of her peers came from places with less diversity, and perceived this to create differences between them:

> *I think I have like QUITE a different, outlook, just because I've come from a city where everybody is different. I've gone to school with people where everyone is different, so, my kind of, approach to people would be different. How much I can tolerate from people would be different. Um (.) like where some people you know might find someone who's going too slow, TOO SLOW, or someone who's a bit quieter, TOO quiet. I'm so used to like seeing different people that it doesn't really, faze me, as much (.) I'm quite (.) OK with, you know, doing anything with anyone*

As someone who constructed herself as highly exposed to diversity, we might expect that 'difference' would be normalised, that she would be less aware of it. Yet her repetition of 'different' (used 44 times in the whole interview), suggested she was acutely aware of differences. Sade's perceptions of difference were extensive, ranging from differences in religion, to how 'slow' or 'quiet' others were, implying that these

characteristics are judged by others as undesirable. If diversity was the norm in her life pre-university, I questioned: why was she so attuned to difference at university?

Sade's rarely described other 'characters' in her narrative (see appendix O for a discussion). She referred to other students only indirectly by comparing them to herself, implicitly ascribing them with opposite traits. Non-Londoners were subtly presented as less tolerant individuals who find some people too slow or too quiet, and are fazed by difference. However, the word 'tolerate' generally connotes annoyance, a sense of 'putting up with'. In the above extract, Sade described tolerating (or putting up with) being too slow, or too quiet. Was she referring to literal walking pace, or something else? Too quiet for what, or for whom? And what did she mean by being "*fazed*" (disturbed, or disconcerted) by difference? Sade later referred to interactions with other medical students who were "*willing to learn*" about what constituted "*appropriate"* behaviour. Perhaps this statement about being "*fazed"* by difference reflected experiences of 'inappropriate' behaviour with students who were less accustomed to diversity, and her developing acceptance of this kind of interaction.

> *Things are a bit slower [in Southampton] than they would be in, um, London*
>
> *Mostly in London, like you know- you know the people that are in London and everybody else is a tourist that we just like, @walk past them and be like, @keep it moving!*

In comparing her experiences of London and Southampton, Sade created a sense of 'us and them'. Her construction of London fallaciously implied that everyone's experience of London is basically the same, while painting a homogenously 'slow' and rural picture of other regions. Describing non-Londoners as 'tourists' is a form of Othering[226], creating a sense of foreignness and not belonging. Sade's confidence and self-assuredness of her place and her belonging in London was clear, contrasting her experience of starting on the BM5 programme.

Awareness of difference: "You feel a bit, like QUITE separate (.) um, because you're, kind of, a bit different in that, like, socially"

In London, individuals identifying as Black make up 13.3% of the population[227]; at the UoS medical school, an average of 3% of BM5 students identify as Black. Towards the end of our interview, Sade revealed how being a Black student at the UoS medical school, in which most students (at least 63%) are White, had impacted her

experiences. In this, and the following extract, I have emboldened Sade's use of personal pronouns to highlight her shifting use of them to symbolise how she changed (discussed below).

> **Sade:** *In terms of (.) preschool experiences as well, **I** was always in a very diverse school. **I** was never the, like, minority, **I** never FELT like the minority in my schools (.) Um, so **I** didn't have that- really much of that,*
>
> **Heather:** *Um-*
>
> **Sade:** *Before **I** got to uni either, um, and then **I** think coming, um (2) COMING to that environment was different for me. I think that first year- **I** think- **I** like, "oh wait, this is- this is a bit different", but um (.) and at first it was intimidating but then **you** just get used to it and **you're** very, like, comfortable and **you** kind of just (.) live your life (.)*

Sade often switched between the personal pronoun "I" and a more impersonal "you" to distance herself from a difficult emotional experience[228], and to represent how she has changed as a person, perhaps now to someone she feels less connected with ("you"). This demonstrates the challenge she faced in the transition to medical school, belying the simplicity and ease implied by the idiom "*just get used to it*". Sade made a distinction between *being* a minority and *feeling* like a minority, highlighting the emotional significance of this experience. This contrasts how she felt in London, where there is so much 'difference' that diversity is the norm, and she therefore did not identify as a minority. At the UoS medical school, the perceived homogeneity of the cohort illuminated her visible difference to the majority. The word 'minority' invokes a sense of marginalisation and exclusion from those who make up the majority, while 'intimidating' communicates anxiety, which is unsurprising given that racist attitudes and discrimination continue to impinge on the social and educational experiences of Black students on university campuses[32,229] and in medical schools[224].

Sade also observed cultural differences which inhibited her integration and sense of belonging:

> **Sade:** *Um, so **I** think in terms of like (.) mixing and things, it wasn't always the easiest and things like (2) SLIGHTLY different cultures, I think? For example, like, **I** don't really DRINK that much, um, just not my thing, but (.) **M-Medics** do @@*
>
> **Heather***:* *Oh yeah, I've heard that @@*
>
> **Sade***:* *Like, a lot of like events are very like, party-ish and things or like, the type of music **I** would listen to would be different to the type of music that a lot of **Medics** would listen to, or (.) Be, drunk enough to not care @and, um, it would be, like to- **I** wouldn't really go to those events as much, so be kind of things like that, that would be like initially like, "oh", like, **you** feel a bit, like QUITE separate (.) um, because **you're**, kind of, a bit different in that, like, socially*

A dichotomy is presented between "Medics" and herself; a belief that to identify as a Medic, one must drink alcohol and attend particular parties. Again, her shift in pronoun use reflects some difficulty in expressing her emotions about this (I versus Medics creates a separation, suggesting she does not identify as a Medic, despite being on the same programme. A shift to 'you' in reference to her own again may suggest distancing from difficult emotions and a lack of self-recognition of this person).

She later described these different cultural preferences as "*dividing*", reinforcing a binary perception that there is only one way to be a Medic, and those who don't conform to those cultural norms are simply not Medics. It implies that those who belong to the cultural majority are entitled to and expect to progress into the profession, while others, like Sade, whose cultures are not represented or celebrated in the institution do not feel a sense of belonging, and feel uncertain about their positions.

Crozier and Davies noted a similar trend of so-called 'self-segregation' from extracurricular activities among South Asian students whose ethnicities were underrepresented and minorities in 13 predominantly-White UK secondary schools[113]. Some teachers criticised the South Asian students for failing to integrate (to form friendships with White students or participate in extra-curricular activities). As the authors suggest, the teachers may have been defensively criticising the failure of the South Asian to conform to 'proper' social norms, and for rejecting what the school was offering, protecting themselves from a potentially threatening and uncomfortable examination of their own role in the enabling or perpetuating the exclusion of these students through defensive Othering[8]. However, the authors identified White-centric

practices, cultural insensitivity, and racial harassment in the daily lives of these students, which the students experienced as excluding.

At the beginning of her university journey, Sade could not see a place for herself socially among the White, alcohol-drinking majority group; many of their social activities were not inclusive of students like her, pushing her to the margins. Expectations that students who are different should simply 'try harder' to integrate into current practices within exclusive systems require 'assimilation'. Sade resisted social pressures to adapt and change her values and behaviours to fit in[97], despite negative consequences for her social experiences. Her perceptions of 'others' were thus primarily based on observations, or interactions she perceived as insignificant.

Earlier in the interview, Sade mentioned talking to students who came from parts of the country inhabited by more homogeneous communities than London (typically portrayed as idyllically old-fashioned and rural). The dynamic between Sade and her geographically 'other' peers, whose limited exposure to diversity, was not always straight-forward, and seemed to create insensitivity, miscommunications or misunderstandings:

> *Like, sometimes, you can- people are more like- people are- a lot more people are willing to learn and be inquisitive and know what's like, what's appropriate and what's NOT appropriate, um*

She did not explicitly state here that this related to race or culture, and when I later emailed her and asked for clarification, she wasn't sure what she had meant. However, there may be a connection to what some UoS students said during the focus groups: that having a diverse student cohort meant that difficult or awkward questions about difference could be asked in the safe space of university, rather than with patients (for example, 'what would that condition look like on my skin [colour]?') It appeared that Sade had, perhaps without seeking to, taken on a role of educating other students about how to discuss topics like racial and cultural difference appropriately. Sade was more hesitant here, taking more time to choose her words, with several false starts and fillers (emboldened) making space for thought[215]. This shift in the flow of her speech perhaps reflects a concern to describe the potentially uncomfortable topics of race and cultural insensitivity in a diplomatic way, particularly with a researcher like me (a White academic from a rural and non-diverse background, like those she is describing).

Sade described her gradual process of accepting, or resigning herself to, her situation, creating a sense of frequency and the culmination of multiple incidents of feeling, or being made to feel different through her interactions with and observations of peers:

> *I think AFTER (.) a while (.) um, you kinda just settle into it and this- and this- Well, there's nothing you can do to change it @@ and you um, settle into it and I think, you kind of get the understanding that, AGAIN that like not everywhere looks like London*
>
> *It's just kind of like (2) Coming (.) to terms with the fact that, like society DOES have these [non-diverse] areas and these niches and you have to be able to kind of (.) work in @ALL of them. Um (.) and be able to like stand in all of them and not let it faze you too much and kind of get over it I think (.) @um in a way.*

The repetition that "*not everywhere looks like London*" expressed Sade's surprise at how different other people's pre-university life experiences had been. Developing this understanding was an uncomfortable experience for Sade, perhaps because it was so unexpected. The phrase "settle into it" suggests that acclimatising to medical school was initially deeply *un*settling. Although "settle" implies becoming relaxed, other phrases indicated it was a difficult and painful process. "*To come to terms with*" is often associated with highly painful and difficult situations, such as death; and perhaps Sade was grieving the loss of connection she felt in London with other Londoners. It connotes becoming resigned to an unpleasant situation, rather than the situation improving. There is an undertone of helplessness, "*there's nothing you can do*", suggesting that Sade felt unsupported and that she assumed a personal responsibility for just "*getting over it*", as if ***feeling*** like a minority is a choice rather than a consequence of institutionalised discrimination and exclusion[230]. Sade had come to believe that within Medicine, and outside of her London bubble, she should expect to be and feel like a minority.

Legitimising difference:

Although it could be difficult to be surrounded by people from different backgrounds, Sade expressed an interest in their lives, or 'landscapes' as she called them, and she began to acknowledge the value of having difference in the cohort. She enjoyed hearing about the 'day-to-day' of living in the countryside, for example, and was shocked by the infrequency of public transport there compared to London. This

encouraged her to question her own assumptions about what resources and opportunities might be available to patients, enhancing her critical thinking skills and helping her to become a more empathic and patient-focused medical student. However, her discussion of this topic was vague, and she felt couldn't "*tie it down to a specific example*"; rather, the interactions that she perceived to have an impact on her medical education were "*mostly little things*".

> It's a different like, kind of, um, perspectives in that way and just understanding of where this person, like, what can they do in their life? How would this have an effect on their life? Whether this treatment would be appropriate for someone from this area and things like that. So, I think it can (.) help (.)

This raises a salient point about the impact of learning within a diverse classroom that could be lost within a narrative analysis, even one underpinned by a view of knowledge as socially constructed and negotiated. Although difficult to measure, monitor or quantify, the cumulative impact of "*mostly little things*" exchanged between students from different backgrounds are likely to have a significant impact on students. In the same way that the effects of microaggressions build over time, without feeling significant enough to report or share in an interview[34], snippets of insights, different perspectives, and opinions exchanged between students from different backgrounds can seep through into a bubble, gradually clouding or degrading it, rather than dramatically 'bursting' bubbles (beliefs or worldviews), yet still powerfully transform understanding of how other worlds and lives can be different.

Despite her earlier sense of helpless and resignation about "feeling like" a cultural minority, Sade played an important role in establishing a student committee to address racial and ethnic inequities with a friend, creating a physical and metaphorical space in which students from ethnically diverse backgrounds could feel welcomed and understood. In HE and in Medicine, friendships are often influenced by social positionings such as ethnicity, with shared experiences and understandings providing comfort and a sense of belonging[31,114]. Through establishing a student committee, Sade forged her own "*community*" and contributed substantially to developing her own (and probably many others'!) sense of belonging at the UoS medical school.

As Sade observed and learned more about other members of the student committee, she began to realise that there is a lot of diversity amongst students on the course, but

that some types of difference can be less visible than others. She also, slightly reluctantly, recognised her own 'bubble' of privilege, which she had minimised at the start of our conversation (that she had initially minimised as inconsequential, appendix O), and learned how discourses of ethnicity can intersect with class to impact medical students' experiences:

> *In terms of educational background (.) Like, mine is quite different to a lot of people (.) um, so things like- there ARE differences in that, like, in terms of, I guess the steps that people take to get some medicine. I think mine was a bit smoother. I'm willing to like, you know, say that mine was definitely a lot smoother than a lot of peoples', for the most part*

Bursting Bubbles: "They're basically at your (1) same (1) level (2)"

Attending placements also increased Sade's interactions with students from different backgrounds and helped down to "*break things down*". She felt that this improved her communication skills. Analysing this extract through the lens of narrative processes illuminated the powerful impact of the unique opportunity that placements create for getting to know students she wouldn't normally talk to.

Extract	Structural analysis	Narrative processes
I think, especially with the placement site when you're working quite closely with people that, you otherwise may not have met.	Orientation 1	Description
Especially because like, in the- in the year group, there's, what, like 200 and something students. You're like, most of time, you won't know everyone,	Orientation 2	Augmentation
But like when you go on placements or you're in like, small groups, and all you have is each other in this huge hospital, um, you, kind of (.) Get quite close people and talk to people quite a bit, and, um, learn a lot more about, like (.) What would be normal for them, what will be normal for you.	Complicating action 1	
What are your beliefs? What are their beliefs?	Complicating action 2	Theorising
And you get quite, close to people and you just see- have different viewpoints, and you get to see things from different- other views,	Complicating action 3	
What does that look like for them? What does that mean for them? Um (.) If they don't have a religion at all, what does that mean for them? What is that like for another person? Um, how do you communicate (.) Different things? How do you communicate different points without it being an argument? Or like a dis-disagreement?	Evaluation 1	Theorising
(.) Um (.) Just (.) Learning to speak to other people, um, and have an understanding of them,	Complicating action 4	
And, they're basically at your (1) same (1) level (2) um (.) As well,	Coda 1	Theorising
And i think what- what's also quite funny, with medicine especially, is that everyone is quite similar as well. I mean, we've all signed up to do this thing for the rest of our lives, and um, so there's a bit of a similarity there, um, in terms of like how people, may come from different places and different countries even, um,	Evaluation 2	Augmentation

As Sade began to consider how *interacting* with students from different backgrounds on placements (more than primarily observing them) had affected her views and experiences of medical school, her narrative became filled with theorising[215]. Sade asked several rhetorical questions as she tried to understand and make sense of myriad differences between students: beliefs, religion, communication style. This created an overwhelming sense that interactions with students from different backgrounds entailed complicated dynamics and required reflection. Sade used interview space to reflect and 'work it out': how had interacting with students from different backgrounds influenced her medical education?

Sade's ultimate epiphany about the *impact* of these interactions (in coda 1) contrasted her exhaustive list of differences: she realised that "*they're basically at your (1) same (1) level (2) um (.) as well"*. This represents a 'moment'[215] of realisation for Sade, that she is equal to other students. Her speech was punctuated by pauses, signifying that she required extra time to process what she was saying. The metaphorical idea of "levels" used by Sade here was also prevalent in the focus groups to describe a social hierarchy in the early years of medical school at the UoS, and perhaps reflects an unspoken cultural fiction about who is most valued or belongs.

After this 'moment' (coda 1), Sade's tone shifted drastically (Evaluation 2). She described similarities between medical students. Her pronouns shifted from the indefinite "you" (to refer to herself) and "them", to a more inclusive "we", indicating that focusing on similarities helped her to feel a sense of belonging, to identify as medic. The flow of conversation became smoother, and her pace increased. Towards the end of our interview, Sade reflected that difference between medical students "*ends up not being as big as a deal as you might think it would be in the beginning*", which demonstrates a significant development from her description of surprise and culture shock when she first began her course. Her London-centric bubble, which had felt all-encompassing, had burst.

8.3.5 Maduka's story (UoA, G2M Y3): "I think (2) It has made me realize I have more options"

Maduka was one of two Black students in his year group in a predominantly White secondary school, where he felt "different" and didn't participate in any extracurricular activities. In the UoA medical school he experienced belonging and a sense of community amongst both G2M peers and students who entered medicine directly. Through observing peers from more advantaged backgrounds, he became aware of opportunities to, and the value of, extracurricular activities and stepping outside of his comfort zone. He shared with me his experiences of joining the university running club after hearing about it from other medical students. Although emulating the behaviours of a cultural majority group may be construed as 'assimilation', there was no sense of a detrimental loss of 'self', 'identity' or 'values' through conformity in Maduka's story. Rather, learning about and taking on new opportunities enabled Maduka to positively develop his identity and refine – but not diminish - his sense of self. He also described a novel desire to volunteer in his spare time, demonstrating a new recognition of his skills and ability to make a valued contribution to communities.

Pre-university educational experiences: *"It was- it was- It was very strange not being like other people"*

Maduka is a Black African male, who was in his third year of his medical degree after completing G2M. He was born in Africa and educated there until his family moved to Scotland, where he joined the local secondary state school (joining in the second year of schooling, after most students had navigated the usual transition from primary to secondary school and established friendships). He described adjusting to the academic system with relative ease, preferring the more "*interactive*" approach to teaching and learning. Socially, however, he experienced some challenges:

> *Um, in terms of social- socially, uhm (1) It was a little bit- It was weird because (1.5) I- 'cause like, it wasn't- It was at- at first, it was, there was some degree of isolation at the start, but like (1) P-P-People try- (2) It's like, it's really- It's really hard to explain, but like I think at the end of the- at the end of the year, I think I did- (1) I didn't make really good long-term friends from high school, even though at the start everyone was like, 'oh, it's like, one of the new- (1) The other Black guy in the whole year. It was- it was- It was very strange not being like other people, but at the end, it just- at the end, towards my S5 and S6, everything felt normal, I (1) I felt like- (1.5) I would say I feel- I'd say I feel like I belonged more than I've- more than I did at the start of my time there (1)*

Maduka's struggled to find a sense of belonging in this ethnically homogenous community. He spoke of his experiences distantly; his language was passive and formal ("*there was some degree of isolation*"). His adjectives are predominantly negative ("*weird*", "*strange*"), suggesting his secondary experiences were almost surreal. His language evolved to neutral ("*normal*") as he progressed to his final years of secondary education, though this seemed to stem from resignation and acclimatation rather than any external institutional efforts to make the school culture more inclusive. Although eventually felt he belonged "*more than I did at the start*", this does not imply that he "*belonged*" so much as he felt less excluded.

Maduka felt some ownership for his lack of belonging in the school: "*It was very strange not being like other people".* His notion of "being" different is powerful, seeming to go beyond potentially superficial visual, cultural or behavioural differences to a much deeper sense of authentic self and identity. By referring to his peers, classmates, potential friends, as "*other people*", he conveyed a symbolic distance between them, reinforcing the sense of isolation he described. His description of his school life was stilted, with several pauses and false starts, indicative of some difficulty in expressing his experiences. Although pauses and fillers were not unusual in our conversation, his way of speaking here greatly contrasted the way he responded to my next question about why he wanted to study medicine (demonstrated in appendix P, p354), indicating that his school experiences and experiences of medicine were very different emotionally.

Awareness of difference: "it's just these kind of (2.5) Opportunities that they've had"

Maduka described the demography of the gateway cohort as much more diverse, with students from "*a lot of different nationalities*". 'Difference' was normal. He described his G2M cohort as "*diverse socioeconomically*", but that the main medical student cohort included a disproportionate number of '*privileged*' students:

> *Definitely like some people you know, had a lot more of a privilege- privileged life. But **I definitely** did get that feeling with a lot of students here. I can't say that for everyone, but a lot of students here, I mean, **prob- (1**) They went to private schools or have had, you know (1.5) You know extensive, you know, international experience that **I don't think** a typical student here, or from a just an ordinary background would've had. **I think (.)** yeah (.) **yeah, definitely**. A lot- a lot of people here, **definitely (.)** have had more varied experience in medicine, like a lot of medical students than- **if that makes sense?*** [**H:** Yeah] *yeah, they- they are quite heavily involved in different activities (2.5)*

His shifts between certainty ("*definitely*") and mitigative phrases ("*I think*"), which I have emboldened, perhaps reflect the lack of relatability he perceived between their pre-university experiences. Structurally, Maduka's speech was full of 'theorising' as we explored this topic, with a higher frequency of false-starts and fillers: while difference was something that he had clearly ***felt*** strongly, he had not actively reflected on it, or unpicked his own sense or feeling that others were privileged, suggesting these feelings did not strongly affect him. I asked, "*how could you tell that they were from a different background?"* Maduka's speech became smoother as he responded with *examples* of privilege gleaned from friends' pre-university experiences:

> *They are more- more exposed to like (2.5) Like a lot of them already, kind of like (1) Were exposed to like (1.5) What medicine was like. So a lot of them would have like docto- um (1) doctors as like their parents and like (2.5) and like (1) They tend to like, be like, you know as students, are like uh (2) Just (1) do- do a lot of extra curric-curricular things. I think it's- it's REALLY OBVIOUS @ or just- or just (1.5) Yeah, or just International- I just, I know. Obviously, there was a guy who I was just speaking to yesterday who was like, yeah, he went to Tanzania for, you know, work experience for his medical application. From that I was like, 'wow OK', yeah that was @@ Yeah, that's kind of what I'm trying to say really, [**H:** yeah] like they've just had broader, broader experiences really (2.5) And different friends. I've had one who is like, yeah, I was, you know I finalist in one competition, for example, for Scotland, like in a sport. So, it's just- just (1) Like, do you understand what I'm trying to- it's just these kind of (2.5) Opportunities that they've had and (1) yeah (3)*

Maduka's expressive "*wow*" and laughter exemplify his surprise and disbelief at the reality of other students' upbringing. He reflected that he identified "*privilege*" by time and resources; the opportunities they had experienced prior to the degree and their ability to participate in a range of "*different activities*", unconstrained by limited financial resources or the need to work or provide care. As Bathmaker and colleagues suggest, the participation of more privileged student in extracurricular opportunities was "*internalised through their pre-university experiences in their social milieu*"[94] (p740).

Being surrounded by students with this economic and cultural capital in his day-to-day life significantly influenced Maduka's experiences of university. As the next extract demonstrates, Maduka's exposure to 'other' normalised lifestyles, practices and behaviours that were different from his own experiences not only heightened his awareness that such lifestyles exist, but also helped him to recognise his own behaviours, values and beliefs. This heightened self-knowledge and self-awareness helped him to question and challenge a previously unrecognised, taken-for-granted part of his identity. Moreover, within the supportive and culturally safe-space of the UoA medical school, Maduka felt able to step out of his 'normal' and try new activities, developing his identity as well as practical skills.

Bursting bubbles: "I didn't really think- (2.5) it's something I would have done – or thought I could have done"

Maduka described how seeing other medical students participate in extracurricular activities helped him to realise the range of opportunities that were available to him, and gave him the confidence that he, too, could participate. Some subjective statements about his developing identity have been emboldened and are discussed below.

> *Another- another impact I would say is being involved in more things, I think (1) Friends from, um, societies and just, uh, just I- I run I- I- I- I'm part of the Athletics club and (1) I- there's quite a lot of medical students in that as well. Seeing how involved they are in other things @has really forced me to like (2) Not- not- not forced, and acting like, self-consciously, just to sign up to things that (1) in school and in first year for example I- I just normally wouldn't (1) think (1) like it- like I'm- I'm, right now,* ***I feel like I'm*** *more ready - I'm less- I'm more ready and confident to take on like a (1) Uhm, just uhm, opportunities that, you know (1) opportunities to, uh (1) um (4) Just- just op-opportunities that may help with, uh, my self-development, like (1) Helping out- helping out, you know, in the community, charity, or just other students? (1) Uh (1) yeah,* ***I think I****- right now, I am more- I am more inclined to take part in those kind of opportunities and also just (.) Additional, just- just- (2) Just additional, um, experience that's related to, um, my academics or Medicine.* ***I think I am*** *more inclined to just go- just be a bit (1) I- just go further, really. I think that, just wanting to get involved more in there or in a different in a wide range of different things (1)*

Maduka suggested that prior to university, he "*wouldn't (1) think*" to participate in "*other things*" during his school education: he demonstrated a "*limited pre-disposition towards accumulation of additional capitals*"[94] (p741) and had put himself into a bubble, making 'non-participator' a part of his identity. A report by the Social Mobility Commission identified that children from the poorest families are less likely to participate in extracurricular activities during their primary and secondary education[231]. As a student who had received Free School Meals, Maduka is likely to have fallen into this bracket. Schools do not always provide opportunities which are appropriate or desirable for students outside of the majority cultural group[113], and low sense of belonging in SURGs has been associated with a reluctance or inability to participate[232]. As participation in activities outside of formal educational curricula are seen by students, admissions deans and employers as a 'positional advantage' in both university admissions[160] and

the graduate market[94], this finding has important implications for WP in terms of pre-university and early university experiences.

Maduka carried an identity of a non-participator into his first year of university (the gateway year), during which he was surrounded by other SURGs. Most SURGs are from low-income families and evidence shows that they are less likely to engage in non-academic activities or socialise during university than their more advantaged peers[17,231]. The difference in extracurricular participation is typically attributed to SURGs' additional responsibilities such as caring roles, part-time working and the constraining costs associated with many sports and club membership[179,231]. However, their typically lower participation may also illustrate differences in social capital: Bathmaker and colleagues reported that SURGs were less aware of the potential value in the relationships and knowledge conferred through participation in extracurricular activities than their more advantaged peers, who are often not the first in their family to attend university[94]. These findings were identified from SURGs in two closely linked universities in a single area of the UK; they may not reflect Maduka's experiences. While I did not explore explicitly with him the source of his lack of participation, Maduka's story illustrates this pattern of reduced participation among SURGs, and highlights the need for institutions to align their provision of extracurricular opportunities with their commitments to WP: are activities affordable and accessible to all? Do the institution make explicit not only what opportunities are available, but what students might gain from them?

Maduka indicated that his attitude towards participation in extracurricular activities began to shift when he progressed onto the medical degree and became surrounded by students he identified as more "*privileged*" and privately educated, for whom these activities were ingrained from their upbringing. Analysis of Maduka's language revealed that he was still developing an identity as someone who participates in extracurricular activities. Rather than taking ownership of his emerging identity through confident language of being ("I am"), he softened each statement about the person he is becoming with "*I think I'm*" or "*I feel like I am*" (emboldened in the extract above). His use of, and then redacting of the term "*forced*" (*to sign up to things*) in the extract above demonstrates the presence of a powerful social influence underpinning his change in behaviour. It conveys a sense of compulsion; while 'forced' would generally have negative connotations, verbs such as "*helping*" and "*wanting*" covey a genuine desire to emulate these behaviours.

Maduka expressed a desire to give back through volunteering, which is a perception of SURGs identified by staff in the focus group discussions (presented in Chapter 7). He described a new confidence in himself and his ability to manage novel and unexpected situations, and a transformed belief that he had a valuable contribution to make to the profession and to the future medical student community:

> *I think (2) It has made me realize I have more options (1) So like I know, very recently, I've- I've kind of just developed- had the idea- idea that I want to like, spend a few months during my holidays just- just in a different country. Just volunteering in the hospital. I don't think that's kind of (1) I- I don't- I really didn't think that I would have that kind of (.) idea two years ago, I just- I don't think that's something I would be comfortable (.) saying to myself, for example* ***[H****: mmm] (1.5) Also, just try just being involved. For example, now I was- I was um, supposed to be involved in a interview for, um, G- um, G2M um (1) med- Medical applicants last- last weekend and (1) Volunteering those role, in a way I can influence. Uh, you know, young medical applicants? I didn't really think- (2.5) it's something I would have done – or thought I could have done.*

To have the confidence to volunteer, one must have the belief that they have sufficient skills, resources and aptitudes to be able to support others, and also be aware of the opportunity to do so. Maduka's observations of (and perhaps conversations with) more privileged peers had shown him, to his surprise, that these opportunities existed and were realistic ambitions for training medics. He later described how his involvement with the running club had helped him to improve his "*planning and man- um, time management*", an unexpected outcome of joining the club.

> *I'm almost starting to also develop that mindset which I didn't have before (2) Yeah, so yeah, it's kind of difficult to pinpoint that to- just to a student. I think it's more of the environment, really, like, the whole group of people wanting the same thing and having the same, you know (2)*

Descriptions of direct and powerfully positive benefits flowing to SURGs from observing or interacting with more "privileged" students were rare in this study. Maduka's narrative illustrates how SURGs can benefit from Observing Others' Worlds. In terms of extracurricular activities, Maduka had initially been positioned within a sort of opaque bubble; he had not been aware of the opportunities available to others, and had not

participated in those available to him. Exposure to other students who were following the “unwritten rules” for success at university was inspiring and empowering, revealing to him some of the opportunities availed to him on campus, and the benefits of participating. Rather than seeing these privileged students and their access and motivation to participate in a wider range of university opportunities as unrelatable or unachievable (a picture commonly painted in research with SURGs), Maduka perceived these students as role models, and joined a running club. He attributed this membership to his development of soft skills, confidence and a refined sense of future self.

Maduka’s enthusiastic engagement with the community of student runners demonstrates that he perceived his own position in the university as legitimate. This findings mirror reports by participants in the UoA focus group, who perceived (and experienced) G2M students as equal to their peers and belonging in the medical school. Maduka’s dramatic increase in confidence and the sense of community he describes starkly contrasts the uncertainty and insecurity he expressed when describing his secondary school experiences. This indicates that the G2M and UoA medical school provided an environment in which he felt included.

However, societies, sports and other extracurricular activities can be inaccessible to students on low-incomes and those with additional commitments such as work or caring responsibilities. Observations of and interactions between students from different backgrounds which reveal inequalities, and the hidden curriculum may therefore not always be helpful, as they were for Maduka. Certainly, social inequalities can be both highlighted and reproduced in the provision (and valuing of particular) extracurricular activities, through expensive club membership, for example, which can exclude some students. Mairi’s narrative below (Mairi’s story (UoA, non-G2M Y3): “I think it would be useful, um- more useful (1) If each (1) kind of (.) medical schools set kind of certain standards”) makes this tension explicit.

8.3.6 Stories which illustrate Unexpected Friendships

Stories about Unexpected Friendships were common in the narrative interviews. Here, I present two interpretive stories from participants Rishi and Priya, which illustrate how getting to know students from other backgrounds supported a deeper and nuanced understanding of other ways of experiencing the world, and how these interactions helped to reframe or change their harmful and incongruent perspectives about what a medical student *should* be. For both Priya and Rishi, these friendships positively transformed their experiences of medical school, legitimising their positions as medical students and illuminating their own strengths.

8.3.7 Rishi's story (UoS, BM5 Y4): "I kind of got the sense that I **had** the university experience"

Rishi believed that medical schools only wanted 18- and 19-year-old applicants, steamrolling directly out of their A-Levels and onto the wards, ready to embrace the full "*university experience*" (i.e., partying). Rishi's own journey to medical school was unconventional; caring responsibilities at home coupled with a break from education created nervousness about his ability to keep up with his peers and limited his participation in social activities. This created anxiety; concerns about fitting in permeated his narrative.

Rishi told two main stories about how Unexpected Friendships with SURGs helped him to feel like a legitimate medical student by reframing his perspective about who is suitable for and can succeed in medicine. By the end of the interview, Rishi presented himself as someone who could not only succeed in medicine, but one makes valuable contributions to others' education.

Expectations about medical school: "I had some anxieties about it"

Rishi was a fourth-year BM5 student. He identified as male and ethnically Asian. His family moved to the UK for "*a better- better education*" when he was a child. After a year of home-schooling, he progressed to grammar school, joining other students in the transition to Year 7 (the first year of secondary school in England). Although he found it a "*culture shock*", he described a sense of fitting in and belonging within a "*mixed bag*" of students from a wide range of ethnic and socioeconomic backgrounds.

Both Sade and Rishi (BM5 students) impressed on me that their selective schools were atypically diverse, inclusive of all students (see appendix O). They pre-emptively protected themselves from judgement by minimising the resources and opportunities their families had mobilised to gain their coveted place in a selective school, and the advantages which they received from their schooling. This reveals a 'silent discourse' about education and advantage in England; and a cultural discourse of discomfort in benefitting from privileged social positions (this is also apparent in Niall's story (UoA, non-G2M Y4): "you started to look at each other as friends, as whole people, and then you look at patients (.) look at them as a whole clinical picture").

He was unexpectedly required to move abroad for work, which delayed his application to medical school. Although he gained useful skills during that time, his perception of medicine as an elite field of academia prevented him from appreciating the value these skills could have in medicine.

> *I learned a lot about myself and there was a lot of skills I could transfer from that to, uh, whatever work I get into I suppose [H: yeah] Um (1) Uh, and even at the time, um, I was thinking, maybe, you know, um, maybe if I come back, um, if I want to pursue higher education, it's been 2-3 years, I can't really go straight into medicine because I'd just feel out of place, like everyone else would be, you know, just out of like A Level, and would just be on the- (.) on that kind of, um, steamrolling of education and they'll be really- Those are the kind of students that, you know, most medical schools want. That's- that's my perception of it.*

Although he did not describe himself as a 'carer', Rishi provided care for his disabled mother, which strongly influenced his decision to study medicine (Appendix Q, p355). He regularly returned home at weekends to continue providing care, and also worked part-time as a Student Ambassador to support his family financially, despite the anxieties this caused about fitting in or enabling him to participate in a 'full' university experience: "*when I went to university, um, and I also had some anxieties about it because I thought, everyone's going to be 19 and I'm 23 and, would I be involved in a lot of things*?"

Rishi's experiences in providing care and his understanding of how disease can affect individuals and their families made him, in many ways, an ideal candidate for medicine. Mature students are also considered as well-suited to medicine precisely because of their maturity, and the insights and skills they can bring from their previous experiences[233] which Rishi considered a barrier. Rishi's concerns about how his differences from the 'traditional' UK medical student might affect his perceived suitability for medicine are common among 'non-traditional' students, such as mature and working-class applicants[61,233]. Such concerns are perhaps unsurprising given the dominant discourses of academic excellence prevailing on medical school recruitment and selection pages[72,160]. Rishi's narrative exemplifies the potential for medical schools to miss out on a wealth of talent and experience by appealing to a narrow pool of potential applicants.

These insights into Rishi's life pre-university help to frame the two main stories that he shared about how Unexpected Friendships with SURGs had influenced his medical school experiences. These influential friends juxtaposed his belief that only A-Level students 'steamrolling' into higher education without responsibilities or challenges could study medicine. His friends helped him to feel like a legitimate medical student.

Legitimizing difference: "I seem to gravitate towards more of the BM6 students"

As noted, Rishi was anxious about fitting in at university.

> *Once I got my offer I came for an Open Day here, to visit the campus and to see some of the accommodation, and I was worried about, um, uh, just your typical university first year student worries: where or what kind of accommodation am I going to get? What kind of people I'm going to meet?*

At the Open Day, Rishi struck up an Unexpected Friendship with a BM6 student. Faizan had spotted Rishi making his way home (clutching the UoS 'Medicine' bag) and chatted to him about studying medicine. Faizan invited Rishi to see his student accommodation, and introduced him to his housemates, a group of BM6 students. Rishi stayed for lunch and played games with them, missing his train home. The same day, Faizan invited Rishi to live with them:

> *I decided to just put my deposit after that. Just went to the office and, um. Yeah. So, that's how I met them. It was just luck actually, um, and, well, his friendliness. But to be honest, I felt like if, um, even if it was other students, um (.) there may be a possibility where I might not have had such an, um (.)* [H: mmm] *engaging conversation with them. So, um (.) fo- for that to lead me to actually wanting to put a deposit down for the accommodation. Um, so, uh, yeah! I think (.) that's- that's how it started. And then, uh, I lived with them for the- from Year 1 to Year 3. So, uh, we've- we've been really good friends since, yeah.*

This represents what McCormack calls a 'moment' in Rishi's story, a turning point[220]. Although he minimised his concerns about meeting people as "*typical university first year concerns*", fitting in and belonging are a common thread weaving his narrative together. This moment, this choice, represents a realisation that he could fit in at

university, that he would find friends. He attributed this significant encounter to good "luck", but also recognised Faizan's friendliness in instigating this important friendship. Throughout our interview, Rishi frequently contradicted between describing his friendship with BM6 students as an **unconscious** process (emboldened), and a conscious awareness of the magnetism of similarity and relatability (homophily[234]):

> *um- I found myself, um (1) gelling with them quite well, to an extent that I lived with them until, um, Year 3, before my placements took me to Ridgeway [A small city outside of Southampton]*

> *in first year when I was speaking to a lot of different people and just trying to work out who (.) would be (.) um (.) Who- who am I likely to be more lifelong friends with and so on? I seem to gravitate towards more of the BM6 students. Um, they seem to have other things like, um (1) Similar things but with- to other respects, where they are required to go back home often or they have other things like jobs and so on to do, whilst alongside, uh, medicine*

This implicit lack of agency in his friendships with BM6 students suggests that, despite perceived similarities, they are somehow unexpected or unusual; the focus group data suggested that there is little interaction between BM5 and BM6 students in the early years of study. But Rishi's connection with the BM6 students seemed inevitable, as if he were pulled by an invisible force.

SURGs are more likely to have responsibilities outside of their academic course, including caring for family members and working part-time[63,171,179,180]. Balancing the demands of a degree with these commitments contributes to lower rates of continuation for these groups; for example, a 2013 report revealed that 29% of Young Adult Carers drop out of UK universities[235]. Due to their low numbers and often 'hidden' caring identities, it can be difficult for young carers to develop friendships at university with others who can understand and share their experiences, while misunderstandings about their roles can create tension[236]. Rishi's friendships with BM6 students provided understanding and support that enhanced Rishi's sense of belonging, which may support Rishi's continuation and progression through medical school[202].

Rishi contrasted his BM6 friendships with his expectations of what would be required from friendship with other undergraduate students, "*the 18, 19 year olds, um, which make up the most of medicine*":

> *Yeah, they* [BM6] *were really good to me and, um, kind of got the sense that I* ***had*** *the university experience without having to (.) You know, do all the clubbing and the nights out and so on, so yeah (3)*

Rishi had a narrow perception of what a "*university experience*" should entail, and that he expected to be unusual or different because of his age and caring responsibilities. Although he felt that the university experience **was** that way, he expressed some reluctance at "*having*" to do those activities, almost seeing them as a rite of passage to belonging. Being friends with this group allowed Rishi to understand that there are different but equally legitimate ways to experience university.

Rishi's break from education led him to panic about the academic demands of the course:

> *Uh, but there were times where I did panic and I was like, 'oh God, how, how, how? How- Was I meant to get that when everyone else knew it beforehand, and so on, things like that, especially anatomy, where (.) people were just naming things off of the cadavers, and I was just- I don't know what that is […] They [BM6] kind of told me things like, what to expect, um, in exams* [H: right] *Um, And, you know, um, which tutorials do work beforehand and so on* [H: mmm] *So things like that they- they gave me loads of different tips.*

His BM6 peers, by contrast, were constructed by Rishi as well prepared for the rigour of the programme, and familiar with university teaching and assessment. Their guidance and support had an important influence on Rishi's experiences of medical school. This aligns with the focus group findings, in which several BM5 students noted that BM6 students' experiences of university in Year 0 made them valuable assets in group work, and that they supported some BM5 students in their academic transition to university.

Although Rishi was enrolled onto the BM5 programme, as a mature, FiF, Young Carer and first-generation immigrant, he represents several underrepresented groups. He may not necessarily qualify for a place on the BM6 programme, and may not have wished to pursue such a route, but feeling different from what he perceived as the 'ideal' medical student caused him to question his suitability for a place on the course, adversely impacting his sense of belonging. Gateway programmes like the BM6

acknowledge that their students may not have the same opportunities, resources and experiences as their direct-entry peers. The first year of the course is part-time, offering flexibility and support for students with caring responsibilities such students therefore have opportunities to meet and share their experiences. Through the curriculum and Year 3 workshops, BM6 students are supported with developing a positive identity as a medic; such support could have negated some of the challenges Rishi experienced during his medical school journey.

Interacting with BM6 students who *had* benefited from this support provided Rishi with overt cognitive guidance, but also emotional support and validation, legitimising him as a medical student.

Legitimizing difference: "It just kind of amazes me, um, how she does that."

Another Unexpected Friendship was with Ayo, another mature student with caring responsibilities, who he described as being very different to the majority of his friends. They met through being allocated as "siblings" to their "Med Family": a scheme that groups new medical students with volunteers in older years for support and guidance. A reflection on perceptions of difference, and my interpretive process when examining Rishi's story of Ayo is included in appendix Q.

Rishi greatly admired Ayo:

> *now she's studying with us and (.) She's literally doing so well in exams. You know, managing to, um, juggle [her caring responsibilities] as well as working (.) shifts as a HCA* [Healthcare Assistant] *and as well as studying medicine*
>
> *It just kind of amazes me, um, how she does that.*

His language conveyed how impressed he was by her ability to excel academically alongside her myriad commitments. He used variations of the word "managed" 9 times in his story of Ayo, while adverbs like "literally" and "as well as" communicate his disbelief and amazement.

Learning about Ayo's experiences prior to medical school and seeing her succeed gave Rishi some perspective on his own situation. He learned that people from a range of backgrounds and with responsibilities outside of their medical degree could

successfully study medicine, not just those "*steamrolling*" out of A-Levels. More overtly, Ayo helped him to worry less about the social aspects of medicine that featured heavily in Rishi's perception of what a medical student ***should*** be, and focus more on studying:

> *One thing I've learned from her academically is that, just attend every lecture you can, especially in first year, when I was thinking, 'oh, do I want to be- do I want the uni experience where, you know, people go out etc and then, you know, um, maybe miss a couple of lectures and then return to the lectures? Or do I want a fulfilling degree?' And I think she, kind of, like, helping make that decision […] she was the one who told me like, if you attend, she- from what she does, is that- what I've learned is that the more I attend lectures, the less I have to kind of revise on my own.*

Rishi and Ayo founded a society to raise awareness of and raise money for a medical condition. Organising events and hosting fundraisers built his confidence and gave him a sense of reward. He was proud of their achievements, describing particular events and revealing how much money they raised. He attributed Ayo's support and encouragement to his development of presentation skills, which he described applying to his medical education, for example when presenting to consultants on placements, which he had previously found intimidating. He also planned to teach medical students in younger years. This represents a great arch of personal development for Rishi: not only does this indicate that he feels he fits in and deserves a place at medical school, he is (cautiously) beginning to show awareness that he has something valuable to contribute to medicine, even within the competitive and 'high-stakes' academic culture:

> *You are, kind of, having an impact on someone else's, um, medical learning - they may base all of that condition that they're trying to learn on your lecture, so it's kind of like, I need to make sure that what I do is um- like the presentation I make Is based off of, you know, current guidelines and kind of, deliver it effectively and make sure (.) um. Uh, That the- they are LEARNING from- something from me, I guess.*

The story of Ayo demonstrates the potential value of 'buddy' systems, like the UoS 'Medical Families' initiative, which partner students who might not otherwise interact. HE students, including medics, forge friendships with students of the same gender and of similar age[31,32,114]; without the allocation of this family, Rishi may not have experienced the important benefits conferred on him through his friendship with Ayo.

The influences of this friendship on Rishi's medical school experiences (gaining perspective and developing skills) are applicable beyond medicine, and have value in all HE subjects and contexts. No other participant in this small sample mentioned their 'Med family'; could the UoS enhance this programme to support more students in capitalising on the potential rewards of participating?

For Rishi, interacting with someone excelling in HE while managing different challenges to his own (experiences of abuse, being a parent) and who role-modelled a positive learner mindset triggered his personal growth; her ambitions and work ethic inspired him to leave his comfort zone. The differences between them did not relate to demographic markers which are commonly used to identify how representative the cohort are of the general population, but are more nuanced. Rishi's narrative helps to highlight and celebrate the richness and diversity that can be found within the standard-entry cohort, which can be forgotten in research on WP and diversity.

8.3.8 Priya's story (UoA, G2M Y3): "it is nice to know that people have little things that you could kind of add to them"

In her early years of medical school, Priya perceived her more privileged peers as "*the crème-de-la-creme*" and doubted her right to a place on the course, having entered with lower academic grades after successfully completing G2M and the medical school application process. However, her recent, unexpected friendship with a direct-entry student helped her to recognise that this belief was unrealistic and unfounded. Moreover, their friendship helped Priya to appreciate the value she could bring to the medical profession.

Pre-university educational experiences: "Uh, it's sort of a miracle to me @@ that I even got in."

Priya is a female, Asian student who was in her third year of the UoA medical degree programme at the time of our interview, following her successful graduation from G2M. She enjoyed her experiences at her state secondary school in Aberdeen, but indicated that she had some insecurities about her academic abilities.

> *Um, I- I did enjoy s-secondary, I (.) wouldn't say, um, I was the smartest @@ at the time. Um, they definitely did, you know, do their best with me and, um, I think the teachers were really nice and supportive. Um, uh, I guess, um, they could probably focus more on me because there is a lot of drop out during the 4th year and that would be really helpful 'cause they could like, you know, spend more time with me and help me and they really did and they got me really good grades. Um, I really kind of enjoyed the subjects as well. And the ways that the teachers taught me them (1) Um (1) Um, I got enough to get in to Gateway 2 Medicine, but I don't think enough for Medicine at ALL [**H**: right] and, um, I was kind of GLAD that Gateway 2 Medicine - it was only the second year that it was running when I got, um, into it (1.5) So, uh, it's sort of a miracle to me @@ [**H**: @@] that I even got in.*

Clance and Imes, who conceived of 'Imposter Phenomenon' (or syndrome), posited that "*despite outstanding academic and professional accomplishments, women who experience the imposter phenomenon persist in believing that they are really not bright and have fooled anyone who thinks otherwise*"[237]. Although she did not explicitly describe herself as an imposter, Priya displayed several indicators of 'Imposter Phenomenon'[237]: in the above extract, she attributed her academic successes in her

Scottish Higher exams to the skills of her teachers. Later in our interview, she expressed disbelief and suspicion at gaining a place in medical school ("*when I got IN, it was a, kind of, mistake*"). She diminished her success in achieving the academic grades required to study the Gateway programme (4 Highers at AABB[238]), misperceiving them as very different to those required to directly enter the Medicine programme, although students from WP backgrounds can enter with 4 Highers at AAAB. She perceived her acceptance onto the G2M programme as a "*miracle*": as unexpected, and inexplicable. As Priya's story later shows, these feelings were exacerbated when she joined the medical degree programme and compared herself to students who had entered directly.

Priya successfully completed G2M and progressed to study medicine at the UoA. However, several factors (primarily the shift to online learning due to Covid-19 in her first year of medicine) affected Priya's capacity to form meaningful friendships with students who had directly entered medicine.

> *I did keep a lot of my Gateway2Medicine friends. And I feel like if I had that sort of (1) ability to mix with them* [non-G2M students], *it would be nice, but obviously, Covid has really limited that.*
>
> *I think we haven't really made, um, too deep of connections. I have definitely met lots* [of] *people that were part of the year one, but it's- it's really hard to make a deep connection, that kind of stays, you know what I mean. And I don't feel comfortable (.) as I would with the Gateway 2 Medicine friends that I have.*

However, she had recently developed a friendship with Sofia, who entered medicine directly as an international student with English as her Second Language who was academically "*exceptional*". Priya's main story was about how her friendship with Sofia transformed her perceptions of herself and of other medical students, helping her to recognise her own strengths and legitimise her position as a medical student.

Awareness of (and legitimizing) difference: "I'd have to work so much harder than anyone else, these perfect, ready-made doctors"

Priya's spoke frequently of Sofia's remarkable intelligence and memory, opposing the way she described herself. She described their friendship as "*transformative*": firstly, because she hadn't previously reflected on how others' backgrounds and experiences of medical school could be so different from her own. The two pauses (emboldened) in

the following extract are some of the longest in our whole interview, perhaps reflecting that this realisation constituted a 'moment' for Priya during our interview:

> *The government from her country funds her to stay and study, which I think is good @@ Yeah, and it's one of those things when I start like, um, you learn about their government and, you know, their life and it's different the way that they have to, you know, get through school and everything. Uhm **(3)** And I didn't – um, not realise, but I didn't think about that before, because I guess like everyone around me had, um, a similar like, you know, background **(5)***

Secondly, becoming friends with a student as academically exceptional as Sofia humanised direct-entry students, whom Priya had previously 'Othered' as super-human, causing her stress and anxiety, particularly around exams. As their friendship developed, Priya realised that her perception of medical students as awesomely intelligent superhumans against whom she could never expect to compete was not based in fact.

The following section of Priya's interview describes her transformed perspective about what a 'medical student' was like as she progressed through medical school and became friends with those, like Sofia, who had directly entered the medical degree, and how this impacted on her developing sense of identity. When analysing Priya's transcript through the lens of language[215], I was struck by the differences in the way she described herself compared to the way she described other medical students: I scanned the text for clauses attributed to "I", and those about "they". I began undertaking a structural analysis and separated the lines to examine the transcript for patterns in functional clauses, but felt that this did not adequately represent the underlying meaning of her words.

McCormack recommends using strategies to present the views highlighted in the data both visually and structurally[216]. I added a visual representation of the changing 'symbolic distance' Priya perceived between herself and her direct-entry peers which thematically underpin this interview segment by separating clauses into 3 columns:

1) Left column: thoughts and feelings about herself ("I")
2) Right column: descriptions of other students as different ("they")
3) Middle column: statements about "we", "us", symbolising that she belongs to the wider group of medical students

As I read the transcript segment in this way, it felt like a poem: there were some powerful descriptions and imagery, the structural organisation added depth and meaning to her words.

I thought that

everyone that came into medicine were kind of like,

the crème-de-la-creme.

They (.) know English so really well that

they can like write thesises,

or something like that.

Because I always thought that

they would be, you know,

refined,

perfect (1)

And, um, meeting- meeting my friend,

um, she's- she-

She makes mistakes sometimes.

If you say, um, uh,

you know what's it called?

Again, five daily.

So, for example, fruit and veg, the five-

*[**H:** right, yep]*

She mistake that for five meals a day,

and it's just like those simple things

that you know they maybe won't understand,

they're a bit nuanced,

you can help them with.

And I'm one of those people that thought

they had everything,

they knew everything.

I basically thought

they were the best of the best in such a way that they- (.)

they don't need to be taught anything from me –

they don't need any part of me@.

And, um, it is nice to know that people have little things

that you could kind of add to them.

Or, you know, that

they're-

they look so perfect.

But they- also they're a bit like you (.)

in some ways.

And it's nice to see that –

just that the fact they're human.

Um, I didn't think that

they were human-human at all.

I thought

they were amazing and (.)

beyond me,

but, uh, meeting them,

speaking to them,

kind of brought them down to Earth in-

from my perspective,

and it's just nice to have something in common with them

and (.) be able to, um, really make mistakes like, together.

And then you know that

they're also making mistakes,

and learning from them,

and it's kind of, you know, um,

the huma- humanizing of them.

'cause I- I definitely didn't feel that way

about any medical student at the time.

When I was in second year,

I thought they were like top notch (1.5)

that I-

I would never belong and

when I got in,

it was a,

kind of,

mistake,

and that I'd have to work so much harder than anyone else,

these perfect, ready-made doctors

This 'poem' is effective as a whole, but each 'column' read separately also tells powerful stories: the left-hand 'I' column contains fewer statements than the others, and they are short, often incomplete ideas and hesitant. These lines symbolise the internal struggle she experienced prior to her third year, her uncertainty about her position and identity as a medical student. They mostly contain the verb "thought": transient ideas, opinions and beliefs. The past tense reflects her acceptance that she was mistaken; her perception was not based in fact. Throughout our interview, Priya's references to perceiving herself as less suitable for medicine than her peers related to her academic abilities.

The right-hand column captures her original perception of students who entered medicine directly. The adjectives she attributed to them are highly exaggerated and reflect a perceived superiority, reminiscent of the perceived social hierarchy identified in the focus groups. SURGs have previously reported strong perceptions that only certain "types" of people can access medicine; that it is elite and 'not for the likes of me'[64]. One series of focus groups in the UK undertaken in 2018 identified that this perception had not shifted 14 years later among secondary-aged secondary students[58]. However, a study by Alexander et al. found that students engaged with medical school WA initiatives perceived their 'different' backgrounds as a strength and could imagine themselves in the profession[239]. Although she engaged with WP programmes (Reach and G2M), Priya felt self-doubt about her suitability for studying medicine compared to others until after second year. Applying for medicine indicates that she *had* considered herself a suitable candidate at some point: did exposure to these 'other' medical students when she began her first year of the medical degree reignite her belief of not being good enough?

FiF students in years 1-3 of a standard-entry Australian medical degree have similarly used language to delineate social difference between themselves and those they perceived as 'typical' medical students. In Southgate et al.'s study, 'typical' medical students were described as "*polished*" and "*a different breed*"; the FiF students described themselves in derogatory terms like "*dirty*" and "*scummo*"[62]. Priya's self-descriptions are far more neutral; this could reflect her current perspective, that she was describing her past self through a kinder and more realistic lens. However, she generally described herself in terms of academic abilities ("*I (.) wouldn't say, um, I was the smartest* @@"), whereas she describes the direct-entry students not only in terms of their intelligence ("*they knew everything*"), but also in terms of their sociocultural attributes ("*refined*", "*they had everything*"). Both attributes have connotations of middle-class status and socialisation[240]; Priya's suggestion that these students were "*ready-made doctors*" reflects the inherent elitism of medicine, a perception that those most suitable to study medicine come from particular, privileged backgrounds.

The description of non-SURGs as "*perfect, ready-made doctors*" reflects a potent construction of some privileged medical students as simply vessels to be filled with medical knowledge and a belief that their backgrounds (and perhaps their confidence) entitle them to be a medic. Their pre-university experiences entailed training for medical school and they are thus adequately primed and prepared for it; it is their destiny. They appear to be surrounded by relatable role models, whose shared experiences with the majority of their peers, teachers and senior practitioners (for example, social connections, cultural preferences, or "skiing holidays", as mentioned by one BM6 participant) validate the legitimacy of the cultural majority in the medical school cohort. By implication, their journey through medical school is expected to be smooth, the curriculum designed to systematically fill their well-established mould. It is worth acknowledging that such a discourse is highly problematic, and may deter institutions from offering support, or students who feel they are expected to lightly tread the path of their role models from seeking it.

SURGs, in contrast, are often presented as imperfect and complicated (or "*high maintenance*", -1711941184.454.676311). Institutions are not currently set up to adequately meet the needs of a diverse group of students; diversity is not sufficiently embedded into the curriculum design, policies, or processes. The needs of SURGs are often unmet within current education systems. SURGs are thus seen to require extra investments of time, effort and resources, and require "moulding" to become suitable to not only have the privilege to study medicine, but also by "*having to work so much*

harder" than their peers and by transforming their aspirations and abilities (e.g., Chapter 6: UoA Rationale for WP: WP is transformative) to become a legitimate doctor.

Legitimizing difference: "the huma- humanizing of them"

Priya's phrase "*brought them down to Earth*" demonstrates her epiphany about how unrealistic her perception of those students was, and metaphorically presents the vast symbolic distance she perceived between them. Before her friendship with Sofia, she perceived that those students simply didn't "*make mistakes*". She later recognised that undergraduate students "*put up that face*" and are trying to prove something; it is extremely unlikely that they never made mistakes, but perhaps were disguising them from their peers. Their ability to 'mask' their humanity is likely to be exacerbated by the move to online teaching during the Covid pandemic, where students may be able to present a filtered and moderated version of their 'best academic selves' both to their teachers and their peers. The terms "*have something in common*" and "*make mistakes, like, together*" (towards the end of the poem) illustrate Priya's developing sense of relatability to her peers, which helped her to perceive herself as a legitimate medical student.

As previously mentioned, Priya's self-perception as academically inadequate was deepened when she compared herself to those who had directly entered medicine, perceiving her own admission as a "*mistake*" and others as "*beyond me*", indicative of Imposter Phenomenon.. Medical students are believed to suffer disproportionately from feelings of being an imposter due to the competitive nature of medical school and the profession[241,242], reported to affect up to half of female medical students and almost a quarter of male medical students in one American study[242] (although figures vary considerably, and the scales used to measure it are used inconsistently)[243].

Addressing Imposter Phenomenon is typically considered to be the responsibility of the individual and thus draws on a deficit discourse. Women in particular are routinely encouraged to attend conferences and seminars, to read texts and empower themselves with the knowledge of what Imposter Phenomenon is, and what they must do to master it and thrive professionally[244]. However, the high figures indicate that it is not an individual issue, but stems from the shared contexts in which Imposter Phenomenon arises (this is discussed further on p238).

Bursting bubbles: "I usually am more helpful with like the comms side of it"

Learning with Sofia and supporting each other to learn from their reciprocal mistakes had a transformative impact on Priya's self-perceptions and her expectations for herself.

> *I've become a lot more positive, um, about the way I- I used to be insecure and like oh - so negative, about, you know failures but (.) Um, I guess in university it's kind of accepting that you're not exactly needed to be absolutely perfect. Just keep learning when you're making mistakes [***H***: yeah!] Um (1) But I can understand, when I was younger, how I would be affected by it, 'cause I didn't know who I was (.) I feel like, uh, after doing universities, just knowing that I'm in university gives me that sense of identity that 'Oh yeah, OK, I actually got in'. So, you know I'm not-@@ I'm not@ the dumbest (.) person in class. I- I- I know the pain of that sometimes and it just feels like, after getting at university, I feel less pressure on myself and I have accepted myself and I just try to take what comes and, um, learn from that.*

By the time of our interview, it was clear that Priya's earlier perceptions of herself and other medics had shifted dramatically. She had begun to recognise that she, and others, are *students:* that the purpose of their education is to *learn,* not simply *be* a perfect doctor. "*Making mistakes and learning from them*" within the safe environment of the classroom is an essential component of learning to become a doctor. She noted that "*I actually got in*" (to medical school), and therefore must be good enough, a significant development from her previous fears and focus on her academic abilities. By becoming friends with Sofia and realising that all students have strengths and weaknesses, Priya developed an understanding that it doesn't matter how you got into medical school or where you're from. Students will make mistakes together, and ultimately graduate by meeting the same educational and professional standards. This mindset may lead to a more open approach to learning: Priya described a newfound willingness to be wrong in her learning, which contributes to improved critical thinking. However, her language reveals some hesitancy, suggesting that she was still developing this aspect of her identity, with mitigative phrasing like "*not exactly*" and "*absolutely perfect*" softening her claims.

She began to appreciate that whilst ‘natural’ intelligence was valuable, there were multiple aspects of being a ‘good’ doctor: “*I've kind of like, you know, realizing it's- being a good doctor- it’s not much about that*”. She found that she had a valuable contribution to make to her friend’s education and equally valued the support Sofia offered to her:

> *I usually am more helpful with like the comms side of it or like the English part of it [***H***: right] Yeah, and she's, um, more the memory. Definitely the memory and she's really good at it. I'm kind of glad that we do have each other*

Priya’s narrative shows us that SURGs’ feeling ‘less’ than their more privileged and *“refined*” peers can diminish over time, and that reducing them can be supported through supportive friendships and interactions between students from different backgrounds. However, as this wider study demonstrates, forging these friendships is not always an easy or natural process, and can take several years. Institutions must actively support their students to identify and value the individual strengths they bring to the medical classroom. One approach to this is to avoid exclusively praising academic excellence by additionally valorising other forms of excellence within medical education[10] (explored further in the discussion 8.4).

8.3.9 Stories which illustrate A Moment with an ‘Other’

The third type of interaction, A Moment with an Other, is illustrated by interpretive stories from four participants’ narratives: Mairi, Aaliyah, Tariq and Niall.

The subplots I present here illustrate the impact that even brief interactions between students from different backgrounds can have on experiences of medical school. The stories from Mairi, Aaliyah and Niall’s interviews originate in negative interactions between students which are rooted in a lack of understanding of difference. By reflecting on these interactions, Aaliyah and Niall developed a better understanding of their peers, and they both described how the ‘other’ students matured over time, resulting in more positive interactions. Mairi called for institutions to introduce policies which would ensure that differences between students could be accommodated within medical schools, without requiring students from different backgrounds to understand each other’s backgrounds. Tariq’s interpretive story is more positive, illustrating cultural knowledge exchange between students from different classes.

8.3.10 Mairi's story (UoA, non-G2M Y3): "I think it would be useful, um- more useful (1) If each (1) kind of (.) medical schools set kind of certain standards"

Mairi's narrative included two stories about interactions with other students which increased her awareness of inequalities and differences between students. Mairi was a graduate-entry student from a rural, deprived area of Scotland. The main story presented here is about moments with 'Other', privileged students on a social committee which exposed extreme socioeconomic inequalities, and how easily inequalities were reproduced when privileged students took on positions of power in medical school. Mairi felt frustrated and became the 'voice' of LSES students to protect them against exclusion from social activities, but felt that the institution should play a bigger role in promoting inclusivity through discourse and policy.

Mairi told a second, highly powerful and emotive story during our interview about an Unexpected Friendship. The story is an extreme illustration of how interactions between students from different backgrounds can 'burst bubbles' by helping students to shift away from surface-level assumptions about 'Others', and recognising that everyone's context is unique. Mairi's application of this insight to her personal and professional experiences in medical school demonstrate the potential for diversity to enhance learning during medical school and ultimately improve healthcare provision. However, as she requested that I redact some potentially identifying information, the differences between herself and her friend are unclear, making the story loosely related to the research question, so is not included in this chapter. Nonetheless, it is an important story to share, and is reported in Appendix R (p358).

Pre-university experiences: "Um (1) I think I was kinda like may as well just give it a go"

Mairi was a White, 3rd year graduate-entry student who met some WP eligibility criteria (but had not done G2M). She described growing up in a deprived, rural "*oil and gas kind of area*", in which the culture and education system directed students to remain in the town and work for the large energy company: "*academic courses weren't really mentioned*". She "*didn't do traditional straight to medicine (.) kind of things*" due to science subjects being unavailable, a common barrier to medicine for rural Scottish students[16]. After a short break from education, she completed an undergraduate Psychology degree through distance learning while working full-time.

Mairi perceived Medicine as elitist and unaffordable, and this delayed her decision to apply.

> *I used to always think of medicine as very much (.) um, only accessible for people who have a lot of money, etc. @@ [which] I do not, UM (.) but, yeah. So, I think for a while I was kind of a bit like 'mmm... Can I actually do it etc?' Um, 'cause it's quite an expensive course to be doing as well, because the intensity- Yes, I'm working just now, but trying to work AND study is a bit of a mission@*

Her ultimate decision to pursue medicine was one of resignation, "*Um (1) I think I was kinda like, may as well just give it a go*", not because she felt that she was not good enough or wouldn't fit in, or that wealthier students would make better doctors, but because she recognised the extensive systemic advantages that students from wealthier families could mobilise to succeed in their applications.

> *there's a LOT from private school backgrounds – um, and they have all the access to like, UCAT prep courses, different work experience options*

Social inequalities and advantages of wealth were magnified in some of her peer interactions, causing frustration and jealousy. More privileged students' lacked understanding of the realities of living on a low income, leaving some some students excluded from opportunities which should, in theory, have been accessible to all medical students. This encouraged her to represent and advocate for students from low-income families at the medical school, despite already struggling to balance her need to work alongside studying.

A Moment with an 'Other': "Sometimes the people who are from the more affluent backgrounds, just have absolutely no clue"

Mairi perceived that many of her medical school peers were privately educated and from affluent families. As a graduate-entry student, she was not eligible for some of the additional financial support that is available to those for whom medicine is a first degree. Her need to work to survive was causing tension and frustration, negatively impacting her experiences of medical school, including her interactions with other

students. She described how she and her friends from "*deprived backgrounds*" had struggled to relate to their wealthier counterparts:

> *[We] kind of get a bit like- 'cause they're having to work and stuff to be- some fund themselves through medicine, um, and it can be a bit frustrating@ I guess. And sometimes when people are like oh, can go out every single weekend and basically still be fine - and that's not possible and achievable for a lot of others. So, I think it it's very much- it's that (.) relatability kind of factor*

Mairi described more privileged students as having financial cushions which allowed them to fully participate in medical school and access opportunities. The absence of competing demands like part-time work on their time caused her to feel "*envy*" and she was "*jealous*" of the freedoms afforded to them; these incongruencies in their lifestyles inhibited integration. She discussed the challenges of balancing work alongside studying full-time and questioned the impact of having to work on students' relative academic performance; a concern about "student workers" raised and discussed at length by Munro[179]. Mairi is not just describing her own experiences here, but those of her friends too. Her narrative is a reminder that, as Munro argued over a decade ago in 2011, institutions must provide better financial support for low-income students and more inclusive curricula which acknowledge "*the study-work challenges facing non-traditional university students*"[179].

Financial differences created significant barriers to positive interactions between medical students, both practically due to part-time work commitments and psychosocially (lack of "*relatability*"). There was an edge of disdain to Mairi's voice when she noted that some of the wealthier students "*happily go round, basically waving their private school flag [and] will fully admit like I have that all this money etc. And some of them have RIDICULOUSLY fancy car*s". This is reminiscent of comments made by participants in Beagan's 2005 study on classism and the experiences of working-class students in medical school[34], and of participants in Brosnan's study with FiF medical students, for whom financial concerns caused significant stress and whose part-time work compromised their studies[63]. However, it doesn't resonate with perceptions of G2M students in either the focus groups or this narrative study. Perhaps G2M students are well prepared in their G2M year for the reality of balancing their studies alongside working? Or the additional support and guidance in the G2M year gives them greater awareness of and comfort in accessing

support? A more in-depth study with former G2M and graduate-entry students might provide insights into how all students who may be struggling financially can be better supported.

Mairi offered an interesting insight about how the behaviours and attitudes of wealthier, privately educated students impacted the students who had accessed private school through scholarships:

> *But yeah, certainly from people I've spoken to have spoken to a range of different UM people, but there's a LOT of private schools still (.) from my impressions, um, some people I think are actually quite scared to say they're from private school now?*

[…]

> *they feel like people have a pre (1) conceived judgment of them, etc., if they say they're from private school – like, that they must have loads of money etc. And that's not always true, 'cause some of them don't. Some of them have had scholarships etc.*

In the literature review, I presented research with students from low-income families who had 'withheld' insights that might reveal this part of their identity, or had been marginalised for revealing it (such as attending a non-selective state school)[34,245]. However, Mairi's story reveals that some students refrain from speaking up about experiences and insights that might associate them with a cultural majority. As previous research has found, and as Mairi's story will show, wealthier students can be perceived to be ignorant about the realities of (or insensitive to) those from poorer backgrounds or from minority cultural groups[62]. Mairi's friends who were scholarship students may have been distancing themselves from the risk of being defined within Mairi's flag-waving private-school caricature. However, this is not the focus Mairi's story; tensions of occupying a liminal space between 'normal' and 'privileged' worlds is discussed in greater detail in Niall's narrative (p217).

Mairi's biggest concern about financial inequalities related to social committees being predominantly run by wealthy students with minimal commitments outside of their degree. She described that in a team of 8 committee members, 6 had come from "*private school backgrounds*" and "*none of them I'm on the committee with work [alongside studying] @@ I know that".*

Mairi expressed surprise that committee members from more privileged backgrounds her committee team didn't even have to 'think' about where money for extracurricular activities would come from, or which commitments would have to be sacrificed or juggled to participate in social activities: this was a novel worldview for her, and she was also shocked by their ignorance of these issues for LSES students.

> *Sometimes the people who are from the more affluent backgrounds, just have absolutely no clue of like charging people ridiculous amounts for some things!*
>
> *Medical school students seem to love throwing Balls. I don't know why* [H: @@] *But it's like even things like if you're gonna do that, give people a lot of notice. Don't just be like: 'right, tickets are going on sale this day and they're done by the next day'. That's it. That's not possible for a lot of people and- some people need to work and save up- erm (1) and just trying to chat to them to make them realize, actually people don't have (1) all this- A lot of people don't have all this extra money lying around regardless, and just being inclusive and accessible as like, you're going to put people off. If you're going to keep it up, etc. UM (.) but (1) and some people you do have to be @more blunt with @@ um, than others. Whereas others you can just kind of hint and they'll get the hint and then kind of pass it on. But uhm (1.5) yeah, I think it's (2) In a way, I think it would be useful, um- more useful (1) If each (1) kind of (.) medical schools set kind of certain standards for the societies in terms of if you're going to charge students- like, how to make events more accessible, because I've certainly never seen anything like that, and I've done quite a few societies and various different roles, and I've never seen any standard set, erm, because I think it would make it easier both as a committee (1) um, and as a whole medical school (.) to be all singing from the same kind of (.) hymn sheet as such*

Mairi's frustration that more privileged committee members often unthinkingly made decisions which excluded students from less affluent backgrounds is evident through several linguistic features. Her exclamative statements, listing of barriers, and repeated use of imperatives (e.g., "don't") build a sense of her exasperation and impatience. There is a sense, through the use of present tense and active voice and the broad "*some people*", that these conversations are a regular occurrence; despite her efforts, the other committee members have not started taking issues like different resources and amounts of free time into consideration when planning social activities which should be accessible to all.

The notion of the privileged students not having "*a clue*" echoes comments by an Indigenous Australian medical student in Southgate's study, who noted that privileged students were nice, "*just their upbringing has probably made them a bit ignorant*". Both Mairi and Southgate's participants recognised that it was unreasonable to expect these students to know about or understand the impact of lacking resources and opportunities, an experience very different to their own. Mairi made an active choice to help to mitigate against the harmful effects of the other students' lack of awareness, despite feeling overwhelmed by her commitments. By "*just trying to chat to them to make them realise*", Mairi became the 'voice' of students on low incomes and with additional commitments alongside studying. She demonstrated the challenges this presented as she developed different strategies to diplomatically navigate a complicated social dynamic, being "*blunt*" with some committee members and hinting with others. While she accepted this role and recognised its importance and value, she was aware that it should not be her personal responsibility and that stronger institutional discourses of inclusivity are required to ensure that students are not marginalised or excluded. As she later reflected, "*I think if people are left to their own devices, it's dangerous@".*

Mary used an idiom to express her wish for institutional intervention, she wanted standardised rules to ensure that everyone would be "*singing from the same hymn sheet*", regardless of their background or experiences. This phrase perhaps reflects the disharmony she had experienced, implying a sense of chaos; the tensions she negotiated during her interactions with wealthier students who lacked awareness of the social inequalities in their cohort and excluding behaviours they exhibited had a negative impact on her experiences of medical school. Policy and discourse are crucial tools for instigating a cultural shift within medicine; it should not be a burden for students, like Mairi, are already struggling to juggle competing demands and whose single voices may not be heard over the rest the choir. Although individuals can have conversations to "*just try*" to raise awareness about inequalities, ultimately, the responsibility lies with the institution to improve equity throughout the whole institution by requiring and normalising inclusive practices[72,160].

8.3.11 Aaliyah's story (UoS, BM6 Y5): "There was kind of these snide remarks"

Aaliyah was my first participant; it was the shortest interview and there was a lot of interaction between us. Aaliyah didn't turn on her webcam – she didn't explain why, and I didn't ask, but I kept my camera on, leaving the webcam picture of myself distractingly magnified, drawing my attention to my own reactions and expressions.

Aaliyah "*struggled with anxiety*", and the interactions with students from other backgrounds she reported were predominantly negative. Her narrative foregrounds "awareness of difference", and highlights discrimination alluded to by BM6 students in the focus group study. Her stories exemplified how negative judgements from other students can inhibit sense of belonging for BM6 students in the early years. Although these experiences were "*challenging*", she described some positive outcomes for her professionally like highlighting the value of being an open-minded and compassionate clinician. Her sense of belonging improved during placements when she worked with students on BM4 and BM(IT) by whom she felt accepted for her authentic self.

A striking feature of Aaliyah's narrative was the repetitive structural organisation of each story. The recurrent sequences of discrimination and her reactions to them refracted her turbulent but routinised experiences of stigmatisation. She described multiple incidents of discrimination, in which I identified:

- Almost no emotional language
- Rationalisation of discriminatory behaviours
- Aaliyah changing (accommodating) her own behaviour
- Embedded relevant, additional sub-stories to illustrate how such incidents were routine (not isolated
- Language which created distance and self-deprecation.

Pre-university educational experiences: "it can help them get support because they're [patients] not too worried about any judgement"

The incidencts of exclusion she described at medical school seemed to be a continuation of the minoritisation she experienced throughout her earlier education. Aaliyah was raised in rural area South England, which she described as a "*very White (.) area, not very culturally diverse*". She was bullied at school for having an "*unusual name*" and a Muslim father, despite identifying as an atheist herself. On the BM6

programme, she was marginalised for *not* being Muslim, and once again found herself as a cultural "*minority*". Like many SURGs, she perceived herself as skilled at developing rapport with vulnerable patients[63].

> *I've also had quite a lot of positive experiences, but mainly from patient interactions, I would say. Um, so, patients will talk to me about things and they'll- they'll kind of tiptoe around the subject so it could be that, oh, that they need to use a food bank or something like that. And I'm fortunate enough to have never been in the position or, like, know any immediate family that have needed to use them. But I do know of people that do need to use them and because I can talk about it more freely with them, it can help them get the support because they're not too worried about any judgment they'd receive. Um, and, um, also, I think (2) I don't know if everyone is as comfortable with that, maybe.*

However, she was becoming overwhelmed by delivering bad news, fearful of reaching 'burnout', and considering leaving the profession. This choice is congruent with Aaliyah's narrative; but it highlights some cultural and systemic issues embedded within the profession which can deter those who could make valuable contributions. Belonging and social support are strongly implicated for retention[202]; although Aaliyah was completing her final year, her reluctance to continue into the profession illustrates that belonging and social support may also impact student's choices post-graduation.

Discrimination: Negative ones always jump towards the front of your mind first

Once we approached the main topic of the interview, Aaliyah asked for permission to share her negative experiences.

> **Heather:** *I'd like you to tell me about a time, or some times, when you've interacted with students from different backgrounds um, that you feel had an impact on your medical education. You can talk for as long as you want, and I won't be interrupting you, um, but take your time.*
>
> **Aaliyah***: Positive or negative?*
>
> **Heather:** *Either is totally fine.*
>
> **Aaliyah***:* **Well, negative ones always jump towards the front of your mind first** *so? I'm probably one of the, kind of, caveats of the BM6 programme in the sense that I found year zero the hardest year, out of all the years in medical school because (.) of (.) the issues with integration just within (.) the (.) kind of cohort itself. Uhm, I found it to be quite cliquey.*

The metaphorical notion of negative experiences "jumping" suggests that these negative experiences are her most meaningful interactions. What, I wondered, makes a negative experience 'jump' out to you? The emotional significance? A lack of satisfying resolution? Does she often reflect on these experiences, or are they just very frequent? Her narratives suggest all these factors may be relevant.

Describing herself as a 'caveat' encouraged me to interpret her story as unusual or atypical; it became clear that this minimising was a form of protection, reflecting one of many strategies she had developed to cope with being treated as undesirably 'different'.

All four of Aaliyah's main stories about interactions that had impacted her experiences of medical education were negative. One was concerned with interactions with clinicians on placement and has been excluded from this analysis as the primary focus of this research is on interactions with students.

Aaliyah's first story, "*just treat everyone how you would like to be treated*", explored her exclusion from other BM6 students because of differences in religion, "*I was definitely a minority group within a LARGER minority group*". She theorised (and justified) their

excluding behaviours as products of their "*strict*" religious upbringings. In later years, these students had found "*their own journeys*" over time, and later apologised to her.

The second story, "*there were these snide remarks*" showcased incidents of discrimination Aaliyah experienced or witnessed from BM5 students about BM6 students. She attributed such incidents to childishness and upbringing, but described frustration at feeling unable to address them. As students from all five programmes merged in later years and students were forced to integrate, Aaliyah found friendship with and inspiration from BM4s.

The final story, "*you just need to get over this little hurdle*", is about an incident of BM6 marginalisation by a member of teaching staff during Aaliyah's BM6 year 0. It has been included because Aaliyah considered how staff misunderstandings about BM6 could influence the perceptions of WP held by other students and staff.

Although these stories refer to diverse situations and events, they all contained similar narrative processes: particular sequences of action were repeated and functional strategies of speech were repeatedly employed in the storytelling to guide interpretation. This pattern is illustrated with quotes from Aaliyah's three main stories in Tables 9 and 10, and this use of recurrent narrative structures is interpreted below. One story, "*there were these snide remarks*", is then presented and analysed in greater detail.

Tables 10 and 11 illustrate Aaliyah's main story broken down by structural components. Each column is a snapshot of a story which can be read downwards, mostly using quotes from each story which illustrate the narrative feature indicated in the leftmost column. The narrative features in the left common are explained below the tables.

Narrative title / elements	Religious discrimination: "just treat everyone how you would like to be treated"	Programme discrimination: "there were these snide remarks"	BM6 marginalisation: "you just need to get over this little hurdle"
Abstract (summarises the point)	"*I found [BM6] year zero the hardest year […] in medical school because, of, the issues with integration*"	"*They [BM5] kind of have preconceived ideas about BM6 students*"	"*I think clinician-wise, there's probably a lot more that can- can be done*" [to reduce microaggressions]
Orientation **(context – people, time, place)**	"*Lots of people were quite strictly religious. And, I was definitely a minority group*"	BM6 friend in top ten of the class in an exam.	"*some of the senior clinicians […] not really understanding why they [BM6] were able to get in with less grades*"
Complicating Action (what happened)	"*I found it, quite just like, segregated, and […] quite hard to fit in […] I was quite- quite severely judged*"	"*they were kind of slating my friend […] 'Oh, she's BM6. She got extra help, that's why she did so well'*"	"*she was like: 'you just need to get over this little hurdle [BM6 Y0] and then you can do REAL medicine'*."
Evaluation (emotional response)	"*they made it quite- quite challenging*"	"*It did make me feel quite angry. […] because you're BM6 […] it means you can't excel well academically*"	"*I- I was insulted […] it wasn't the most constructive or encouraging thing*."
Evaluation (Acts of Accommo-dation)	"*You can also, anticipate potential judgments patients have about you, then you can kind of modify things to try and make them [patients] feel more comfortable*"	"*I didn't really kind of speak up more than that, and I think, um, going back now, I would have liked to*"	BM5 students are "*so much more confident than me, so I would definitely trust them @over me as well*"
Theorising (rationalising – why did they do it?)	Within Muslim culture, befriending someone who acts against the faith "*they are also responsible for your sins*" [of not being Muslim]	"*Teenagers will be teenagers, won't they? @@ […] I'm not really sure that's anything you can rush or alter*"	"*But then, um, a- a lot of doctors think that […] they don't think people should get in if they need an extra help*"

Table 10: Aaliyah's main stories (part 1)

Narrative title / elements	Religious discrimination: "just treat everyone how you would like to be treated"	Programme discrimination: "there were these snide remarks"	BM6 marginalisation: "you just need to get over this little hurdle"
Augment-ation (adding detail to a story)	"*If someone said a joke and I asked him to explain it, instead of explaining it, the automatic response was: 'you won't get it. You're White*.'"	"*people will only take what you say with a pinch of salt, as if maybe you haven't understood it correctly to be teaching it to them*."	"*As a Dean, she can influence other staff views, and other students, and that might impact how they see us*."
Argument-ation (details from outside of the main story)	BM6 friend with depression quit medicine because of "*shunning*" by peers	Medics Review (satirical play), "*a common theme um, of the running jokes is of BM6 students being poor*"	"*Sometimes if people [clinicians] do know you're BM6, and you come up with a management plan or a diagnosis, they will possibly go and re-examine the patient*"
Resolution (how did it end?)	"*A lot of people have come to me in the later years and have apologized*"	"*for […] the later years, I don't actually think it mattered what programme you were on*"	"*More education that [sh]ould be done and just kind of raising awareness, breaking down stereotypes*."

Table 11: Aaliyah's main stories (part 2)

Two stages of analysis are completed through McCormack's lens of 'Narrative processes'. Aaliyah's stories were structured in sequences that combined functions from both stages: the Labovian style structural analysis (e.g., abstract, orientation), and McCormack's functional narrative processes (e.g., theorising, argumentations).

Each story began with 'Orientation', or relevant context, followed by a 'Complicating Action', a negative interaction or a description of a challenge experienced due to others' actions and behaviours. Each story also contained various forms of Evaluation: Emotional Response, Acts of Accommodation and Theorising.

'Acts of Accommodation' entailed Aaliyah's responses to these experiences which undermined or diminished herself. For example, after experiencing religious discrimination from BM6 students (in the first story), she changed her behaviour with

patients to avoid eliciting similar discrimination from them. In the second story, when BM5 students academically stigmatised her friend on BM6, she felt unable to challenge their misconception, enabling an unwanted behaviour to continue. In the third story, when a member of staff undermined BM6 students, she became self-deprecating. She also evaluated all of the incidents she described by 'Theorising' why people would behave in such a way.

Her stories included embedded sub-stories about other incidents which were thematically relevant to the main story (Argumentations). Through these argumentations, Aaliyah conveyed that these three main stories were not isolated incidents of stigmatisation, but were just examples. 'Augmentations', additional details more directly relevant to the main story, reinforced this sense of frequency, justifying her inability to address the issues, for which she felt some responsibility.

Each story had a different type of 'Resolution'. The first story resolved happily, with Aaliyah meeting those who had initially excluded her in an informal, social setting and became friends. In the second story, academic discrimination ended when placements began, and programme identity became less important than the shared experiences of learning in practice, and Aaliyah began to encounter and befriend students enrolled on the BM4. The story of marginalisation from teaching staff was left unresolved, with Aaliyah recommending institutional change.

The structures of Aaliyah's stories are more complex than stories from many other participants. They reflect the persistent nature of microaggressions, and the turbulent emotional journeys they represent as Aaliyah processed these negative interactions and tried to learn from them. This structure demonstrates the range of strategies she used to cope and progress with her medical education, highlighting her resilience, empathy and persistence. Moreover, the cycles of discrimination indicate that microaggressions occur between students from different backgrounds, negatively impacting students' experiences within medical schools. Aaliyah's feeling of uncertainty and regretted inaction highlight the institutional responsibility to create an equitable and supportive environment for all students.

Aaliyah's story of interacting with BM5 students and experiencing discrimination is presented and interpreted to illustrate the structural pattern of her stories throughout the narrative.

Illustrating the pattern: "There was kind of these snide remarks"

Abstract, orientation and complicating action:

> *Initially in BMY1 [*after Year 0*], so, the first year of integration. Uhm? Some of the other students who didn't come from the BM6 course, they kind of have preconceived ideas about BM6 students. And I remember one of my peers did exceedingly well in our first-year exams and we had an assessment and feedback lecture, and they talked about the top ten students and she was one of them, and instead of (.) people being pleased or congratulating her and being kind, there was kind of these snide remarks, 'Oh, she's BM6. She got extra help, THAT'S why she did so well.' Uhm. And I know, there's something called the Medics Review which is, kind of this, play that the society puts on every year, and it- it takes the mick out of, um, kind of everyone. Uh, lecturers, s- student groups, and- and It's all in light-hearted fun, but I know a common theme um, of the running jokes is of BM6 students being poor. So, for example, BM5 students couldn't give away their textbooks 'cause they would need to give it to the BM6 students 'cause they couldn't afford them, and that's like, quite a common running joke within- in the drama production. Um, don't get me wrong, I love the Review, I find it really funny, but, um, that- that was highlighted.*

This story was about a particular incident that happened in the past; Aaliyah's inclusion of dialogue is unique to this story and thus marks it as particular memorable and significant moment for her. Aaliyah's brief shift from predominantly past to present tense ("*they have preconceived ideas about BM6 students*") and her generic sense of the other 'characters' ("*they*", "*people*") in this story are therefore unexpected. The generic sense of other characters implies that such incidents were common and not restricted to a particular group or individual. The shift to present tense reinforces this impression of discrimination being a frequent occurrence and creates the impression that the stereotypes continue to impact Aaliyah's interactions as a final-year student.

Argumentation

The specific story of the 'snide remarks' by her BM5 peers was left unresolved at this point of the conversation as Aaliyah provided an augmentation about how the Medics Review 'comically' dramatized the classism of the medical school. Micro-aggressions towards BM6 students due to being poor were both commonplace and accepted (or at least, unchallenged), even by BM6 students, as a source of humour, echoing previous studies on classism in medicine[34,245]. Although Aaliyah minimised this issue, calling it "light-hearted" and defending the Review, her inclusion of this story as an explicit

example of discrimination illustrates its powerful impact. Diminishing the impact of this incident is a typical example of Aaliyah's "Acts of Accommodation", in which she overlooks or strives to understand her peers' unkindness, while backgrounding her own wellbeing.

Evaluation

Later returning to the main story of the 'snide' response to her BM6 friends' academic success, Aaliyah described another Act of Accommodation through a sort of 'Bystander Effect': she had identified an inappropriate behaviour within an imbalanced power dynamic, but felt unable to challenge the underlying attitude. She conveyed her frustration and regret at not responding adequately to these students:

> **Aaliyah:** *It did make me feel quite angry. Um, because the way I interpreted it, which possibly wasn't the way it was meant to be interpreted, was that, because you're BM6 and possibly you haven't gone to private school you haven't had, that start in life, it means you can't excel well academically. Um, which, is very much not the case and I'm very much a firm believer of um, regardless of what your background is, you can do anything if you put your mind to it. Uhm, and. I- I don't know, I'm not someone that's good with confrontation so I just I remember being sat at lunch with a group of girls and they were all BM5 students and they- they were kind of slating my friend. And, like, I just- all I said was that 'she works incredibly hard and she's really clever', but I didn't really kind of speak up more than that, and I think, um, going back now, I would have liked to. Hindsight is a wonderful thing, isn't it?*
>
> **Heather:** *@It is, yes, and confidence as well. When you're- when you're in a group, it can be can be tricky and I think- I think that's something that you- you learn over time, isn't it*
>
> **Aaliyah:** *@@ Comes with age, that's for sure! And there is a difference between social and professional situations, like if I were with a patient (3) …*

Although she explicitly reported feeling angry, her story contains little emotive language, symbolic of a sense of emotional repression and a feeling of being unable to act which ran throughout her narrative. Other SURGs have felt similarly powerless in such situations, with one female FiF student in Southgate's study describing that "I bit my tongue" when she was discriminated in medical school[62].

Aaliyah invited me to respond; her question, “hindsight is a wonderful thing, isn’t it?”, conveying a hope that I would understand and perhaps indicates a feeling of guilt or remorse. Although she did defend her friend, Aaliyah felt disempowered in that situation for many reasons, including: concerns about misinterpretation, self-perception of poor ‘skill’ in managing conflict and her (self-perception of) immaturity. ‘Bystander’ training is becoming increasingly common and is offered in many universities.

Advocating for vulnerable individuals is a critical skill for healthcare professional. Perhaps offering Bystander (or Upstander) training this to all students and staff (or by baking it into the medical curriculum), students and professionals like Aaliyah in such situations could be empowered and better equipped to confidently respond to discrimination in alignment with their values. Moreover, embedding training into curricula can support everyone – even those who don’t “see” a problem (because they haven’t personally experienced it) to identify their own behaviours which could be perceived as discriminatory, and thus reduce their incidence.

For Aaliyah, applying the skills and knowledge she gained through negative interactions with students, like this one, to advocating and supporting patients was a common thread. Like other gateway students (Priya, p187 and Tariq, p226), Aaliyah was highly focused on *becoming* a doctor. What could she learn from interactions with other students that might be helpful in her interactions with patients? However, unlike Tariq’s narrative, Aaliyah’s story indicates that interactions between students from different backgrounds do not need to be positive to have a practical outcome: Aaliyah described becoming more open-minded and focused on providing equal and compassionate care to patients, as well as reflecting on the importance of advocacy. This realisation was initially uncomfortable for me, and prompted many reflections. Some of these thoughts are included in the excerpt from my journal below:

> *Is it realistic to suppose that we can reduce, let alone eliminate all discrimination between teenage students? The first step to celebrating difference and diversity must involve acknowledging it – and this will involve highlighting it where it might not have been recognised. This will inevitably be uncomfortable and difficult for many people, as it has been, and continues to be for me: difference is so often seen as ‘the elephant in the room’, a taboo topic which should be avoided for fear of offence. How can universities create safe and open spaces in which differences and their associated difficulties are openly discussed, where students are supported to process and explore challenging feelings? Link to Sade’s narrative about ‘exposure’.*

Augmentation

Aaliyah augmented her story by theorising why some BM5 students might stigmatise BM6 students. Through becoming friends with other students from more privileged backgrounds (indicating a series of unacknowledged, positive interactions), Aaliyah learned that many students from 'traditional' backgrounds had vigorously trained for medicine through extracurriculars, extra tuition and work experience. She empathised with their possible frustration towards BM6 students, "*and then you've got someone sat next to you, who, as it were, 'got away' with not doing all of that*". She also diminished the students' responsibility for 'slating' her friend, "*teenagers will be teenagers, won't they? @@"* reinforcing her feeling of resignation, a sense of inevitability that classism will prevail in medicine. Given that themes from Beagan's on classism in medicine in 2005[34] continue to be reported nearly two decades later both anecdotally[101] and in academic literature[245], perhaps this belief is warranted.

A further argumentation justified this perception: like other working class, female teachers[246], Aaliyah received academic discrimination from BM5 students in earlier years had undermined her authority and expertise when teaching when her BM6 status was revealed:

> *"As soon as people realize that you're BM6, sometimes people will only take what you say with a pinch of salt, as if maybe you haven't understood it correctly to be teaching it to them"*

Resolution

Aaliyah's story ultimately ended happily as she described improvements in integration during placements, where programme membership was perceived as less significant, aligning with the findings in Chapter 7.

Aaliyah: *for the large majority of the later years, I don't actually think it mattered what programme you were on because you got mixed up so much. Um, I know in final year I was in a hospital for eight months with eleven other students, so 12 of us in total. And I think seven of them will BM4s. Three were BM(IT)s, two would be BM6, so there wasn't really a- it was all mixed up and jumbled and we didn't know anyone until we got there, which was actually really nice.*

Heather: *And what was it like learning with- with that group?*

Aaliyah: *They are great. And it's really helpful being with them- well, some of the BM4 students because they've got an incredible work ethic […] Kind of a lot of the [BM5] attitude is: "we'll go home at lunch time. We're not gonna stay extra. We're not going to do that", and I- I'm very much someone that always tried to attend everything and sometimes they would get frustrated at me if I stayed later because it would make them look bad, as it were. But the BM4 students just had a very similar work ethic to me*

This reflects a perceived sense of 'entitlement' that some 'traditional' medical students convey once they have enrolled onto a medical degree, while gateway students (like Priya and Tariq) and other SURGs (Sade and Rishi) communicate a very strong recognition that they are in medical school to learn. This is discussed in more detail in Priya's story (p187). Aaliyah's positive experiences of interacting with BM4 students also indicates that the UoS medical school could review whether there may be earlier opportunities for interactions between the multiple cohorts.

8.3.12 Niall's story (UoA, non-G2M Y4): "you started to look at each other as friends, as whole people, and then you look at patients (.) look at them as a whole clinical picture"

Niall's story illustrates how interacting with medical students from different backgrounds helped him to become more accepting of differences which he couldn't understand. He described how growing up in a working-class community affected both his ability and his desire to fit in to the privileged educational spaces of private school and medical school. Experiencing discrimination due to his working-class accent in the early years of medical school initially caused anger and frustration. However, over time and with conscious reflection, Niall used these incidents as opportunities for personal and professional growth and development. He learned to "*agree to disagree*", and work alongside students with different worldviews. Applying these insights to medicine helped Niall to provide high-quality and equitable healthcare.

Pre-university educational experiences: "I've moved up into that bracket I guess"

Niall was a 4th-year male post-graduate medical student who identified as ethnically Scottish/Indian. He grew up in a "*fisherman's town, it's like a proper rough old school coal mining industry town*", where many of his friends were from '*working class communities*'. He (and a working-class peer) perceived that most of his medical school peers had lived comparably sheltered lives and held misperceptions about people like those from his home community.

> *We know what it's like to see people that (.) their life depends on a [football] game, you know? (1.5) Like that's the only good thing in their life. And like people that will drink all their money away (.) and still have a good life. But (.) in the eyes of, maybe society, they're bums, you know, whereas that's not what I think at all. And that's not what he thinks. 'Cause that's what we were growing up with*

He described his background as "*a very (1) mish-mash dynamic @*". His dad was a in construction and his mum worked in a salon, both strongly valued education. He described how his dad's business became very successful and his discombobulating transition through social classes:

> I- I- I would have classed myself as like (.) in the lower bracket when I first started like high school and then as my mom and dad's business (.) progressed, I've moved up into that bracket I guess

Niall transferred to private school for GCSEs; his his parents wanted him to have a higher quality education:

> [My hometown] *It's a pretty rough place, so like I think their idea was to Get Me Out of there and (1) try and put me on a good narrow path*
>
> *Um, I went to first a public school (1) then me mum and Dad wanted me to have **a BETTER** education so they decided they want to put me into private so (1) In my high school years I went to a school called Uptown Academy (.) Um (.) in terms of what it was like (1) it was good. I think having an (.) Indian mother and an East-End Glasgow father (1) It was very much focused on: 'You WILL do well' (.) Um (.) they were like (1) 'You've got to aspire to do something good as opposed to just (1) sitting around waiting so (1) Uh, in terms of my school life and stuff, it was very like (.) focused, I would say (4)*
>
> *you feel a certain- with Indian anyway, and most Asian cultures- If your family or (1) the male side of your family do it, I think there is a sense of (1) Almost a duty a wee bit initially (.) I think, as a kid I was felt like I need to do this because it's what's expected of me.*

Niall distanced himself from the decision for him to attend private school; he described pressure from his mum and his Indian heritage several times in our conversation, "*my mum being Indian- if you know how that sort of (.) @diversity works, it's either: Doctor, Lawyer, Engineer, or, as my mum would say, Bin Man*". This conveyed the feeling of loss of control and agency he felt: his language, "*narrow path*", "*focused"*, "*duty*", all create a sense of constraint and repression, a sense that he felt blinded from other opportunities. This perhaps sets the context for the discomfort and defensiveness he felt when interacting with some private school students at the UoA.

Although Niall had friends across "*a very broad spectrum*" (socioeconomically) during private school, his accent and worldviews created a social barrier. He didn't share any negative social experiences, but felt that "*I didn't fit in so much in that*

clique". He retained a strong attachment to his working-class roots, but struggled to reconcile this with appreciating the benefits conferred by being in this privileged space[23]. He felt "*very fortunate*" to have access to expert support and guidance while applying to medical school.

Gaining privilege rather than being born into it made Niall conscious of the benefits and status that wealth offered, and he hoped to use his privilege to serve others. His pathway to medicine was inspired by a visit to Auschwitz, where he learned about Joseph Mengele, a doctor who performed deadly experiments on patients. Niall described his horror and disgust at this abuse, which catalysed Niall's ambition to advocate for and protect vulnerable people.

> *I just felt a sense of anger (.) and sort of urgency that like (.) I need to stop- or stop people like that and (.) I just felt like I want to be good by people and make sure if I'm on a ward (1.5) Nobody can do that to somebody. It's very- That's a very strange one.*

The experience shaped his perception of what a doctor should (and should *not*) be and highlighted the social role of doctors. He strongly valued equality, and throughout our interview he showed his frustration about classism from his peers from more privileged backgrounds.

"If I say it "wrong" [air quotes], it's like a- a giggle and laugh"

Niall told many stories about friendships and interactions with students from a range of backgrounds: he did not come across as prejudiced against the middle class. However, the main story I present here is about a moment Niall experienced with students from privileged backgrounds. Niall struggled to reconcile his "*working class background with the middle-class environments of the university*"[17] (p53); a tension between acknowledging his upward mobility but wanting to distance himself from his more privileged peers, who he described as lacking understanding of the real world. The following extract has been presented visually to represent Niall's struggle to understand the conflict he experienced: line breaks have been used to highlight pauses and false starts, reflecting the tension.

Um, another- another time was (3)
It's always um-
This is a maybe not (1)
as nice a one, but it's an interesting one as (1)

'cause I went to a private school

'cause the couple girl-
girls in my year who (1)
I don't know, they're-
they're Edinburgh Private School born so (1)
They kinda just had a really (.)
like the world is this way, sort of-
you have to-
which (.)

I personally don't tolerate-
I get quite angry about that, erm (.)
because I just think like-
I'm from-
like I said, my mum's half Indian.
I've worked in India like
I've gone-
I've been like volunteering in India and (2)
Yeah, I-
I initially couldn't deal with that.
I found it very difficult because I was like,

'how can you not have a bigger understanding
that there's more to life than people in private schools in Edinburgh?'

Niall's linguistic choices magnify his perception of difference between himself and the other students in his story: he "*went*" to a private school while they were "*born*" into a private school life. Social class and class identity are relational and relative, contextualised by the backgrounds and behaviours of others around you[17]. Niall perceived the girls' privileges as different to his own and sought to distance himself from them, minimising his own middle-class experiences and foregrounding his understanding and experiences of deprivation[247].

Niall inferred that the girls have only had one way of experiencing the world and have not had exposure to the different ways of living that he had. Although he denoted that they were perhaps naïve or ignorant of working-class cultures, his assumptions about them highlights his limited understanding of *their* possible life experiences. Southgate and colleagues found similar tensions among Australian Indigenous students who were also navigating their experiences of social mobility in medical school[248].

Niall later described how the girls in his story "s*ometimes almost make fun of some people for way they spoke here (1)*", particularly targeting working-class accents and colloquialisms. He initially expressed that this class elitism "*angered*" him and struggled to reconcile how individuals with classist beliefs could become ethical medics. As I delved into the topic, trying to understand what working-class Scottish dialect might mean, or what the girls might have said, he began to undermine his initial reaction:

> **Heather:** *Could you give me an example of what you mean by that?*
>
> **Niall:** *(3) It's kinda- it's kinda hard to give an example as such (1) because I- I may even have a chip on my shoulder if I was being totally honest about it. I think that that's only natural, but um (1) OK, it's just kinda like, if you if you don't speak with the like, Edinburgh accent or something, and I'm not- like I said- I'm not very good at (.) vocalising sometimes what I mean (1) and if I say it "wrong" [air quotes], it's like a- a giggle and laugh and then that sort of clique of friends that came from that (.) sort of schooling or- if that makes sense-*

Brushing off these experiences as "*a chip on my shoulder*", Niall implied that he was being over-sensitive, that his perception of stigma was unreliable. He dismissed his sensitivity to microaggressions as a natural consequence of his struggled to fit in to private school. Like Aaliyah (p213), Niall later rationalised (or theorised) their discrimination, shifting the focus to *their* possible discomfort in the interaction[245].

> *I think that also comes from the fact that they they're scared that they don't understand it, so they make fun of it to just make themselves feel better. So yeah, but then they make friends and they, yeah (3)*

Niall perceived discrimination among medical students to be an unpleasant but largely unavoidable part of the medical student journey for SURGs. However, the harm of classism within medicine extends beyond the classroom; the health outcomes and mortality rates of working-class patients are worse among those who perceive judgement from their doctors[249-251]. As Niall suggests, discrimination often stems from a lack of understanding or awareness; it is therefore essential to equip all medical

students and professionals with a consciousness of classism, microaggressions and marginalisation.

Niall's frustration at feeling unable to articulate his experiences of microaggression, his uncertainty about whether the giggling and laughing really constitute an issue about which he is permitted to feel discomfort, illustrates why microaggressions are challenging to identify and address. Facilitating safe environments in which issues like classism can be discussed without prejudice in medical classrooms may support students and staff to recognise and identify microaggressions, and thus reduce them. Discussions about diversity can be uncomfortable; Sayer found that discussing class and relative social positioning catalysed a wide range of complex and often negative emotional responses including guilt, defensiveness, resentment and shame[252]. Reflecting on your own social and cultural identities privately is difficult[253], but sharing personal aspects of yourself with others, particularly those from different backgrounds with very different life experiences, creates vulnerability. These complicated dynamics can lead people to minimise both their own privileges and the difficulties of others to protect themselves and find safe territory[247,252], leading people to shy away from potentially awkward but transformative discussions of diversity, difference and privilege.

Approaches to creating openness and awareness may initially be best on a small-scale. At a UK medical school, four working-class medical students attended workshops to discuss moments of feeling marginalised at medical school, and produced comics to represent these moments[245]. As they shared and discussed their stories and identified shared but previously hidden experiences, the participants developed their own understanding of classism, privilege and marginalisation. They described feeling empowered and hopeful for change. However, we should avoid placing responsibility on individuals, and ensure that support for managing these situations is coupled with strategies for reforming organisational cultures and structures[9]. Strategies such as unconscious bias training coupled with reverse mentoring may promote awareness of and sensitivity to difference, while facilitating supportive professional relationships between students and staff[8].

Although Niall was initially frustrated by these interactions, he described over time the personal and professional growth they catalysed, which would improve his medical practice:

Niall: *I just- I've gained – working with these Edinburgh girls - a BETTER understanding, that, if that's not what we agree on (1) let's just talk about other things and (1) I'll accept you, you accept me (1) And that's the end of it really@@.*

Heather: *Yeah (1) and do you think that's gonna be useful for you as a doctor? (1.5) I guess kind of like-*

Niall: *Yeah! Because it's already starting to, 'cause I'm a bit of a people pleaser in my heart, like I just wanna make everybody happy, so I've come to realize like sometimes you just will get people that just (1.5) You can't agree, but that's life, er (1) So yeah (.) it's helped. It's made me start thinking like- you don't have to agree with your patients decisions- you don't have to challenge them to change them- sometimes you can agree to disagree and like (1) hear them and not judge (1) and maybe they will grow and maybe they won't. (2) It's helped me to put one patient out my mind and just focus on the next one, because if- (1) If you're triaging patients back to back, and you gotta see four or five in a row, and one person in a bad mood and then they (.) put you in a bad mood, you're not going to give a good quality of care (1) to the next patient. So, in that regard, it's helped a lot, yeah (1)*

After our interview, Niall emailed me to thank me for the interview, describing the opportunity to reflect on and articulate these difficult experiences as therapeutic. His story captures the powerful potential of actively reflecting on difficult personal experiences and personal differences for developing emotional intelligence and valuable professional competencies. He directly attributed his difficult interactions with students from different backgrounds, those "*born into*" privilege, to his development of valuable qualities for professionals in positions of power: acceptance, tolerance, and a self-regulating belief that being respectful may be more important than being right. While this should not be taken for granted as an inevitable outcome, providing students with space to reflect on and discuss such interactions could provide opportunities to understand each other other and facilitate greater openness to interacting with other students or patients who are different, which could improve rapport building and increase trust.

Niall's unusual motivation for medicine revealed his belief that professionals in positions of power, like doctors, have a responsibility to advocate for and protect those who are treated unjustly. He identified that his own (over-)focus on injustice (ironically) risked interfering with his ability to provide equitable care by potentially allowing his frustrations to impact a patient interaction. He learned how to prioritise his value of

providing quality healthcare over his commitment to his potential role as an advocate for the working class.

Niall felt that experiencing discrimination reinforced his commitment to patient-centred care, heightened his awareness of his own potential for biases and prioritisation in his role as a doctor. These is an element of resignation in this realisation, a slight helplessness that he can't "change" potentially harmful misperceptions that others hold. Agreeing to disagree can be perceived as shutting down an interaction or relationship, but resolving conflict peacefully can actually *begin* a relationship, creating space to move on and move past disagreement respectfully, enabling further interactions which create connections and developing understanding. More importantly, Niall demonstrated that he had developed an effective strategy for working with these students, an ability to put aside their differences in support of their common goal, rather than being distracted by their differences. However:

Niall reflected on how his interactions with students from different backgrounds could powerfully transform and broaden perspectives. As Niall learned to "agree to disagree" with his 'different' peers and focus on teamwork, he got to know them better. He realised that they, like himself, were products of their upbringing, and were capable of growth. He, and his peers, all realised that 'Others' are whole people and not just parts (e.g., working class). He felt that most students, particularly his friends, applied this understanding to patients that they might previously have stereotyped.

> *(1.5) Um, yeah, I think within my friendship group now as we've come, it's four years since we started being friends and stuff. There was a couple to start that maybe didn't fully grasp that sort of (1) I don't know (1) that people come from all sorts of backgrounds and it's not our place to judge and things like that, and (1.5) But now it's a lot better, but I think in my year group there's a massive- There's a massive stigma from more privileged people to maybe some sort of working class and. A big one I think is just (1) As we get to sort of 4th and 5th I think it gets weaned out of you because you started to look at each other as friends, as whole people, and then you look at patients (.) look at them as a whole clinical picture (1)*

Recognising that patients are whole, complicated people with multiple and intersecting identities could have a transformative impact on medical education. Stereotyping and pathologizing of patients based on particular demographic markers does occur in classrooms, creating or perpetuating potentially harmful misperceptions and misunderstandings that could affect clinical practice[34]. Students in the focus groups in this study noted, for example, that teaching staff did not discuss with students how a skin condition like jaundice might be diagnosed in a patient with darker skin. Niall's story reveals how forming connections with students from different backgrounds can support training medics to recognise that there is more to individuals beneath what can be learned about them from the surface, and encourage them to look beyond it.

Most research which explores SURGs' experiences of classism in medical school are undertaken with students in Years 1-3. This study adds a valuable perspective, demonstrating the longer term impacts of such incidents over time; further research could expand these insights as students matriculate into the profession

8.3.13 Tariq's story (UoS, BM6 Y4): "You hear from other students about (1) what that's like from the other side"

When Tariq appeared on my screen for our interview, we shared a moment of recognition, "Oh, it's you!" I had taught Tariq briefly, and he'd shown an interest in my research. He was a conscientious student who worked well with others but was quiet, so I was a little surprised by how articulate he was throughout the interview. His stories were focused, organised and detailed; he was experienced in talking about this topic. We chatted away before starting the recording. His accent was familiar; he'd grown up near to my home town. Our conversation was comfortable and flowed smoothly.

Tariq began his narrative by revealing a sharp awareness of his personal context in relation to WP.

> *The place- town that I'm from is quite (1) socially deprived, I'd say. It's from, like, a lower socioeconomic background in comparison to places that I've seen now later in my life* [**H**: mmm] *um, so in terms of (1) schooling (1) I went to a state school so um, yeah, just (.) government funded (1) No grammar school. Nothing like that. No private funding, um, my family, like, couldn't afford that and I just- yeah, they wouldn't see that it's (.) necessary to be honest*

He met several BM6 eligibility criteria, and was cognisant of how these factors affected his university experiences. Tariq shared multiple stories about how observing, interacting with and becoming friends with more privileged students highlighted gaps in his knowledge or skills that he was keen to develop. However, these interactions also illuminated strengths of his background, like unique cultural insights he could share. Tariq's narrative aligns with Yosso's concept of Community Cultural Wealth[96]: in his interactions with other students, he skilfully mobilised various forms of capital to enhance his own and other students' development in medical school. For the sake of brevity, only two stories are included here, which illustrate how sharing moments with other students shaped Tariq's medical school experiences.

Pre-university educational experiences: "I can come back and help people (.) like (.) my mum."

Tariq was a male, fourth-year BM6 student of Pakistani heritage. He described his community, his parents and teachers, as lacking educational aspirations, "*It's just one of those schools where PASSING is enough*". In Australian research by Southgate,

medical SURGs on a direct-entry programme used negative and self-deprecating language like "*dirty*" and "*scummo*" to describe their backgrounds and origins, particularly in comparison to students they perceived as more "polished"[62]. Although Tariq was clearly aware of the 'social and cultural differences'[62] between himself and many of his peers, he simply acknowledged them without judgement. This could reflect Tariq's emotional maturity, educational stage (having attended medical school for 5 years compared to Southgate's participants 1-3 years). It may also be a product of his enrolment on the BM6 programme in which students are receive specialised support and are actively encouraged to reflect on and celebrate their cultural differences[166].

He did express some lingering surprise that he had gained a place at medical school, "*for someone like ME, um, to get into medicine (2) I was just quite FORTUNATE that I naturally was able to score quite highly*". He later acknowledge how much work and initiative he had taken to gain a place without any formal guidance or support. While he was shocked to discover the contrasting experiences of many of his peers, who had received private tutoring and use family connections to gain work experience, he perceived his own pathway as beneficial, highlighting his mobilisation of aspirational capital[96]: "*I think that- that kind of like, has made me more independent as a person now, especially at Med school, 'cause I'm so used to just doing it by myself*".

He also attributed 'luck' to his successful admission to medical school when I asked him why he wanted to study medicine: he had 'accidentally' chosen the right subjects and happened to get the right grades. Almost as an afterthought, he shared a more personal motivation: his mum's illness. During hospital visits, he became excited by the "*holistic process*" of medicine, and was inspired by his mum's transformation after receiving a proper diagnosis and treatment.

> *That's what REALLY got me interested, seeing that you can make a difference (1)* [**H**: yeah – I-] *in your (.) economic place, in your background, in YOUR community. Meeting patients where they're at, like, what's going on in your life? Using this really cool process of doing the whole identifying signs and symptoms, doing the investigations, coming out with your differential diagnoses and then making the diagnosis, and how are we going to manage this patient? What difficulty- what differences is that's going to make to their (.) LIFE? So yeah, I think just that whole process of seeing someone close to me go through that* [**H**: yeah, it's-] *I think that's really what pushed it, like, OK, this is a career that I can see myself going through, and I can actually make an impact in the society (.) that I've grown in. I can come back and help people (.) like (.) my mum.*

Tariq's focus on becoming a doctor to help patients from his own community reveals the impetus for his personal development and growth ambitions. Tariq was involved in caring for his mum, and it is common for young carers to be mature and reflective, and see themselves as having a worthwhile contribution to make[254]. These qualities are evident throughout Tariq's narrative. This insight may account for Tariq's unusually self-aware and reflective narrative of personal development, and very conscious, continuous learning from (and with) students from other backgrounds.

Tariq's secondary school "*was heavily Asian*" and the students "*were all pretty much from lower socioeconomic backgrounds, like socially deprived*". Tariq was the only UoS participant who felt that the medical school *was* diverse, and who described immediately felt a sense of belonging. He attributed this to the BM6 programme culture

and student demographic:

> *I was expecting it to be a heavily middle-class (1) White medical school, as you have that, um, perception in your mind before you come (1) um, because that's what historically most schools are being labelled as: White, middle-class males (1) But then when I came to Southampton, especially with the BM6 program, it was quite (.) interesting to see that there was so many people from different socioeconomic backgrounds and who are (.) from similar positions to me in terms of (1) um, economically and just money and just opportunity-wise. So yeah, I think I got to relate to them a lot, and I was- I felt more, 'OK, I fit into this Med school a lot easier', 'cause I didn't feel out of place, whereas if it was just a heavily White Med school, I'd be like 'OK, middle-class one'. I'd be like, 'OK. I need to (.) adapt a bit more. Maybe I need to change'. So that's why I didn't feel that I needed to change. I think that's something that BM6 really allowed me to understand about myself (1) that I don't need to change to do medicine*

His early experiences as a SURG sharply contrasts Sade's and Rishi's: both SURGs on the BM5 programme who initially struggled to transition to medical school and feel that they could belong there. Tariq found his peers relatable, and he quickly learned that he didn't need to assimilate into a middle-class culture to succeed in the profession. This is also strikingly different from Southgate's findings, whose participants described feeling pressure to 'refine' aspects of themselves[63]. Tariq's Year 0 experiences served as a frame to the rest of his narrative: his early experiences of belonging in medical school strongly influenced his future interactions with students from other backgrounds when he progressed into Year 1.

Although Tariq explicitly stated that he did not feel that he needed to change as a person to succeed in medicine, he was aware of skills which he needed to improve. While he constructed himself as an independent learner, he also identified "*skill sets which I see and I want to IMPROVE*" by Observing Others Worlds and forming Unexpected Friendships. A story about how observing privileged students' communication influenced Tariq's experiences of medical school is included in Appendix S (p361). However, the main focus of Tariq's interpretative story centre on two powerfully transformative examples of reciprocal cultural knowledge exchange.

A Moment with an 'Other': "I can see like (1) what's the point of widening participation and having us all together"

Tariq shared two very specific examples of unique cultural insights he exchanged with students during placements, drawing on his Experiential Capital[98]. One example of Tariq offering cultural insights to other students is presented in table 12, which highlights interesting structural features.

Extract	Structural analysis	Narrative processes
Um and even me, like, i can teach others as well, like in terms of- (1)	Abstract	
So, one of my placements with them obstetrics and gynaecology.	Orientation	
And i was explaining, to like (1.5) another [BM5] student like how (1) individuals, particularly women, who aren't very educated, they present lately, sometimes, because of their background that makes sense. So, when they come from that lower socioeconomic backgrounds, they don't always understand what post-menopausal bleeding is. Sometimes they don't understand (1) if they're feeling bloated, abdominal pain, fatigue, they don't understand that: ok, these are that red flag symptoms, potentially, for an underlying pathology. A lot of them just, live with the pain and get on with it. And some of them don't have time, or don't always trust doctors. And i think that- people, once you like talk to them like yeah, if this [patient] was somebody in my background like, they maybe wouldn't take this [symptom] seriously. Whereas someone who's from more educated background they would take this-, yeah.	Complicating action	Description
And i think just having these conversations with people [other students], it's- it's good because i understand it from my perspective from my background and they can shine some light to me on their background.	Evaluation	Theorising
And then maybe they [BM5 students] understand better and instead of getting like, frustrated by it or thinking they [patients] don't care, they [student] can just be like (.) Aware (.) And maybe that changes how they talk to the next person, the next patient. I don't know.	Evaluation	Theorising
And, if i wasn't chatting to them, i wouldn't know that they didn't know, and then i wouldn't like maybe (1) appreciate what i can bring.	Evaluation	Theorising
And i can see like (1) what's the point of widening participation and having us all together	Coda	

Table 12 Structural analysis of an extract from Tariq's interview

Although Tariq began this story by describing a particular moment with an 'Other' student *("I told **another student**"*), he shifted to a more general sense of talking with other 'characters' *("having these conversations with **people**"*). This suggest that conversations, moments, like this are a regular occurrence for Tariq; this was one typical example. As the extract demonstrates, Tariq used our interview space to begin theorising about the impact of these moments with other students, making sense and meaning of them as he spoke, marking a shift in tone from his smooth and flowing discussion of patients and pathology (in complicating action). His evaluative statements are more hypothetical, and his language was unusually cautious, "*I don't know*", "*maybe*", conveying a hope rather than a certainty that he was making a positive impact on other students. In the abstract, he expressed a hint of surprise that someone like him, "*even me*" could contribute to his peers' learning. This story suggests that he has thought more about what he can learn from others than what he can offer within medical education. The shift to present tense in his Coda implies that impact of increasing diversity through WP is a revelation that Tariq processed during our interview, a recognition of a previously backgrounded awareness that his cultural knowledge and insights can be beneficial to others.

Providing students opportunities to recognise their strengths in an environment in which multiple forms of excellence are valued could be critical, particularly for SURGs who, in other studies, have compared themselves negatively to the 'traditional' medical student. Tariq presented as a highly reflective and emotionally intelligent student who had most likely thought about this topic before, but even he benefited from the time and space our interview provided for him to explore his own influence on other medical students. Others may need more support and guidance; ideally, such opportunities would be baked into medical curricula so that all students are encouraged to celebrate the strengths and differences they bring to the classroom and profession.

Cultural insights were not exclusively given by Tariq, but also received from other students. Tariq described how mental health issues were commonly "*brushed aside*" or "*not really well dealt with*" in his home community. Most people he knew didn't have the time or understanding of mental health to take it seriously, you just "*get on with things*". It was something for people with money and flexible jobs to worry about. Consequently, he hadn't felt it was important when he started medical school, and had taken a limited, academic interest in it during his first years. On placements, when discussing patients' pathology with medical students from "*more educated backgrounds*", he was surprised by how often they factored mental health concerns into their equations, and how easily

they spoke about it. He described engaging with students about their insights and experiences in mental health:

> *You definitely get (.) spoken to about, and you learn from (.) others, definitely (2) you know, some students have had those experiences like in their families, which I've never had. Where I'm from, you don't talk about it, so even if it is going on, you wouldn't really know. But you hear from other students about (1) what that's like from the other side, not just, in a lecture theatre like, what's the symptoms, what's the cause, what's the pathway. You get to hear like (1) what's it like to like (1) have that (.) in your life. And- and (.) become a bit more empathetic, I guess.*

Again, this 'moment' was generic rather than contextualised to a particular interaction, creating a sense that these moments were occurring regularly. The moments evoked a powerful, emotional response in Tariq; the majority of his story was made up of evaluative comments about how valuable and interesting it was to hear these insights and perspectives:

> *But now I can see how important it is.*
>
> *But it's been so valuable to learn from other students*
>
> *It was nice to see things like that*
>
> *It's quite refreshing, the way some people's mindset is, and the way they think like just, in terms of patients*
>
> *I'd be like, that's interesting*

However, unlike other stories he told, Tariq did not articulate a longer-term impact of these insights on him or his practice, whether he incorporated and used these insights in better understanding or treating patients. They are incomplete reflections compared to his other stories, suggesting he was still processing them and making meaning. Nonetheless, this unique story reminds us that cultural knowledge exchange can be reciprocal and do not only flow, as some studies imply, in a single direction from SURGs to their peers from cultural majority groups: two other examples of this are presented in appendix S.

Towards the end of our conversation, Tariq reaffirmed his social commitment to returning to his home town to practice, adding colour and depth to an expanding body

of research showing that SURGs are more likely to work with deprived and underserved communities[84,100,126].

> *The reason I want to come back home is (1) Because it's my community and I want my first few years to be there and (.) to make a difference in my own community. I mean, I've- I've made like leaps in education now and I want to bring those skill sets back.*

The focus of Tariq's interview was his desire to capitalise on opportunities to learn from students from a variety of different backgrounds to achieve his goal of developing a breadth of skills and insights he could use to serve his home community. In other studies, SURGs have described the important contributions they can make to medicine, such as an understanding of underserved patient groups. In doing so, some have highlighted the 'ignorance' of their privileged peers about this cultural knowledge, while potential opportunities to learn reciprocally have not been acknowledged[62]. It would have been interesting to reinterview Tariq at a later stage in his journey to medicine to explore whether he used these insights in his medical practice with patients.

As I have argued throughout this thesis, most research on SURGs on standard-entry programmes emphasises SURGs lack of integration, the detrimental impacts of sociocultural difference, and say little about how SURGs can learn from students who are over-represented in medical schools. Indeed, Reay described social mobility as "*a wrenching experience. It rips working-class young people out of communities that need to hold on to them, and it rips valuable aspects of self out of the socially mobile themselves as they are forced to discard qualities and dispositions that do not accord with the dominant middle-class culture that is increasingly characterised by selfish individualism and hyper-competition*"[255] (p667).

I do not wish to argue that this is never the case for SURGs, and certainly cannot deny that we need to better understand the types of discrimination and adversity SURGs currently experience in HE so that we collectively eradicate them. However, I believe that such evocative messaging, while well-intended, can actually contribute to and exacerbate the current challenges of inequalities in HE. Rather than inspiring positive action, Reay's words, for me, created a sense of helplessness and pessimism. As Reay rightly argues, working class students deserve much better educational experiences and to feel safe. However, we can't change institutional culture overnight,

and we cannot protect working-class students who are currently navigating HE from these harms by simply removing them from the middle-class cultures which seek to destroy their most valuable assets.

Tariq's 'paradigmatic' stories about his interactions with BM5 students demonstrate a remarkably different possible experience of being a FiF, working-class student. His emotional intelligence and a learner mindset supported Tariq to see his position in this middle-class world as an opportunity to refine and share, but never diminish, valuable aspects of his self. Perhaps this stems from the supported offered to SURGs on gateway rather than standard-entry programmes, and this should certainly be a focus of further research. Tariq's story is a reminder of the need for more research which allows us to learn from, disseminate and celebrate *positive* experiences of trail-blazing SURGs[21], and use those insights (*as well as* an enhanced understanding of discrimination) to transform institutional cultures and support all students to thrive.

8.4 Discussion of the narratives

The overarching aim of this PhD research was to explore how increasing diversity through WP was understood and experienced in two UK medical schools. In Chapter 7, I identified differences in the ways that students from different backgrounds were perceived at the two institutions, which affected SURGs' integration and inclusion in their respective medical schools. Despite these differences, positive outcomes of diversity, such as enriching learning and changing worldviews, were consistently reported by all medical students in Years 1-3 and by medical staff. Having used focus groups to capture a breadth of perceptions, a more in-depth approach was required to explore *how* those outcomes were realised in such different contexts.

In this study, I utilised narrative interviews and analysis to deepen our understanding of how interactions between medical students from different backgrounds can affect their medical school experiences. Brief summaries of all participants' narratives can be reviewed in section 8.3.

8.4.1 How increasing diversity through WP transforms worldviews

I interviewed students in later (clinical) years of their medical education for this research and was expecting some novel or different insights into the outcomes of interacting with students from diverse backgrounds as students progressed to their clinical, patient-facing years. However, the outcomes reported during these interviews were similar to those identified in the focus group study reported in Chapter 7. Focus group participants could only really share how they *expected* student diversity to impact their future practice in healthcare; in this study (Chapter 8), some participants confirmed that the outcomes they recounted, such as improved communication skills, *were* influencing their practice with patients.

Participants in this study (Chapter 8) described how interacting with other students triggered transformations in their worldviews, their understanding of themselves and of others; they developed more openness, acceptance of difference and empathy; they developed their communication skills, confidence and practical skills; and some reflected on how differences between students illuminated systemic inequalities within the medical school and profession, and took on active roles to address them. All participants reflected on how they had developed personally through their interactions with students who were different to them, and most also believed they had developed professionally, explicitly making connections between their interactions with diverse

peers and their ability to provide higher quality healthcare to their current and future patients.

However, the main focus of this study was exploring *how* those outcomes were realised through students' interactions. Although each participants' journey was unique, all participants described how their interactions with students from different backgrounds triggered powerful transformations[256] or epiphanies[220], as having tangible effects on their personal and professional worldviews and identities. Figure 11 below illustrates the types of interactions and epiphanies or realisations which facilitated the above outcomes of interacting with students from different backgrounds.

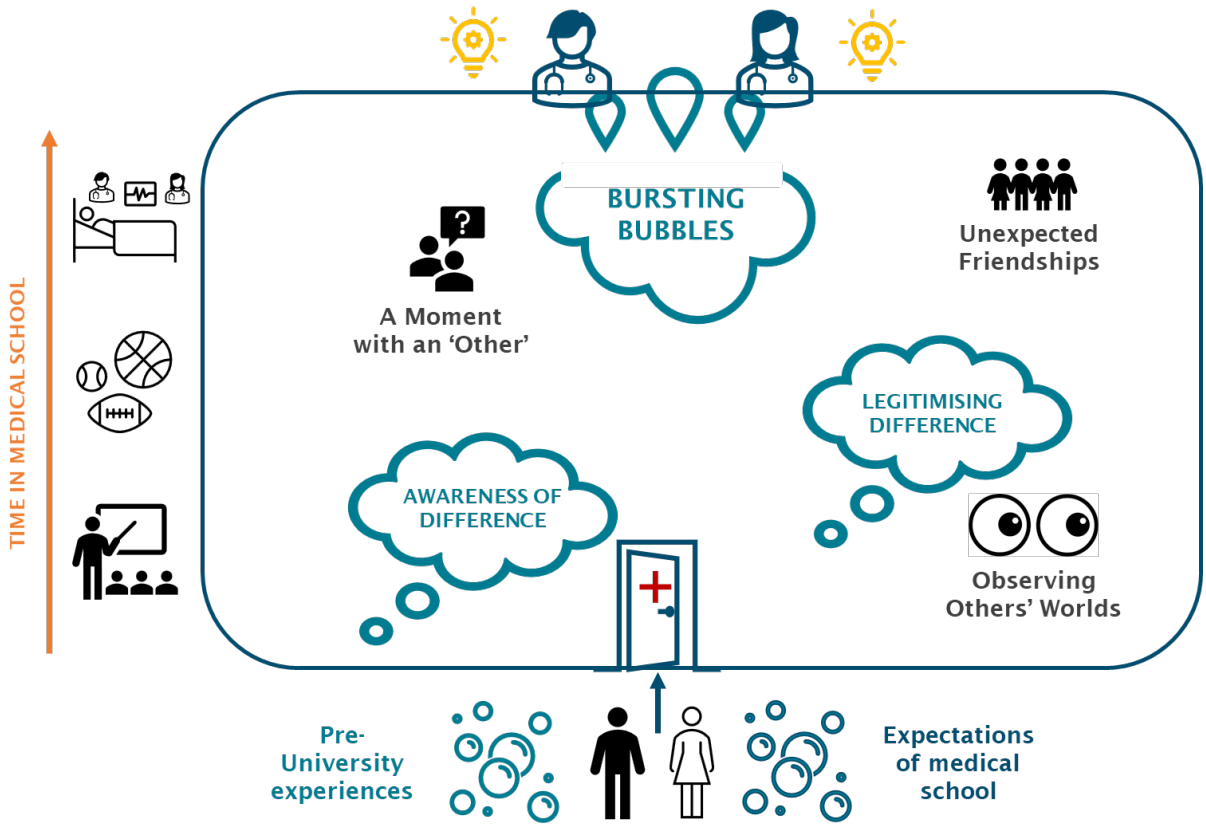


Figure 11: A visual representations of the narrative analysis findings

Students (along the bottom of the figure) enter medical school with unique pre-university experiences of the world and expectations about medical school which inform and shape their interactions with medical students from different backgrounds. The left side of the figure represents the opportunities during medical school for students interact with others: their shared education within a classroom setting, sports and societies, and placements. The grey words (e.g., Observing Others' Worlds) represent the types of interactions (see Interpretive stories) between students which influence medical school experiences. The blue thought bubbles (e.g., Awareness of

difference) represent the epiphanies, or realisations, that my participants experienced as a result of their interactions, leading to the transformative outcomes they described (e.g., realising the significance of mental health in medical care).

I have comprehensively discussed each participant's individual experiences and epiphanies in their interpretive stories, relating their experiences to their medical school context (case). In this discussion, I reflect on some of the common epiphanies I identified as I cross-examined the narratives.

8.4.2 Pre-university experiences and expectations: perceptions of 'Medics'

All participants described changed perspectives and worldviews, contextualised in their unique experiences prior to attending medical school. A significant and (perhaps naively) unexpected difference between the findings of this study and the focus group study (Chapter 7), is that for 6 of my 8 participants, the positive outcomes of diversity were rooted in painful internal or external experiences. This is likely to reflect the intimacy of a one-to-one interview creating a safer space for participants to express vulnerability. Sade's initial difficulties in medical schools stemmed from a culture shock of leaving a highly diverse and cosmopolitan city to one which was much less visibly diverse. Her inspiring response to the adversity she faced was to create a supportive community, creating a more inclusive environment in which students from different ethnicities can find a greater sense of belonging, potentially blazing a trail for their success. Rishi (BM5) and Priya (G2M) experienced internal turmoil as they began their university experiences based on exaggerated perceptions of what a medic 'should' be ("*superhuman*", according to Priya), particularly pertaining to their academic abilities.

As many other researchers have noted, the elitist culture of medicine and perceptions of who is suitable to be a medic very powerful and pervasive, adversely affecting SURGs with the potential to become excellent medics[58,64,72,160,257] and SURGs who successfully enter medical school onto standard-entry programmes[62,63]. Academic competition persists throughout the medical journey, as students are encouraged to compete for the highest grades to be considered for 'higher status' specialisms such as surgery, backgrounding and marginalising the other valuable qualities required to become an excellent doctor[2,10]. Priya and Rishi's narratives highlight how the crushing pressure of medicine's academic meritocracy exerts deeply emotional and psychosocial impacts on medical students' education by creating fears and anxiety about academical inferiority, and attributed their place on the programme to luck, inhibiting their sense of belonging. By contrast, those who accessed the degree

through recently achieving the typical grade requirements were seen as deserving their place, as "*ready-made doctors*" (Priya) and unequivocally expected to thrive.

Most students will sometimes doubt their capabilities in HE and in medical school. However, when these beliefs are held consistently, even in the face of contradictory evidence (such as passing exams), they can be extremely harmful for students. This mindset or framing is often termed as Imposter Phenomenon, although it is increasingly recognised that the labels and terminology can themselves be harmfully pathologizing. Imposter Phenomenon has been linked to burnout[242], emotional exhaustion[242], anxiety, depression and psychological distress among medical students[258]; the impact of valorising competition and academia above all other qualities which are needed to provide excellent healthcare must be reconsidered. Academic competence is, of course, absolutely essential. Razack and colleagues recommend the use of an 'academic threshold', after which students should compete for and in medical school based on *other* characteristics that are imperative to delivering desired social outcomes[10], and building a medical model of social accountability[2]. This could relieve the immense pressure on those students who enter medicine with lower grades but who, as this (and other) research have illustrated, have valuable contributions to make to both medical schools and the profession.

The cultural change of creating a broader conceptualisation of 'medics' which values diversity could also reduce the potential impact of "Intruder Paradox". This is a recently coined term emerging from a study which sought to disentangle the differences between qualified female physicians and medical students who *internally* felt like an imposter, and those who were made *by others* to feel like they didn't belong due to discrimination[230]. For example, female medical students reported feeling like intruders when medical staff (benevolently or otherwise) advised them against pursuing surgery because it would be difficult to 'fit in' to the male dominated speciality. Further research is needed to understand and tackle this significant barrier to embracing diversity within medical schools and the profession.

8.4.3 Awareness of difference, legitimising difference and bursting bubbles

Feeling like an imposter, intruder, or unacceptably different in medical school was not exclusively attributed to academic differences for my participants. Nearly all the UoS participants, Rishi, Tariq and Sade, recounted their concerns about fitting in at medical school due to being 'different' than the 'typical' medical student they described (or experienced on arrival). Aaliyah (BM6), Sade (BM5), Niall and Mairi (both non-G2M)

experienced negative, psychologically painful and sometimes isolating interactions with their peers from different backgrounds in their initial, academic years which made themselves feel unacceptably ‘Other’. Although Mairi did not describe feeling different herself, becoming more aware of ‘how the other half live’ highlighted how wider inequalities in society were reproduced and perpetuated in medical schools. The differences created barriers between students, and took time to resolve into positive outcomes, which generally occurred as opportunities to work closely with those students on placements.

Three of the gateway student participants, Tariq (BM6), Priya (G2M) and Maduka (G2M), described predominantly positive interactions with students from privileged backgrounds which affected their Awareness of Differences during their interactions. Interactions with more socioeconomically privileged students were not raised in the BM5 students’ narratives, but non-G2M students, Niall and Mairi, recounted their interactions with more privilege students more negatively. Niall described his initial perception that privileged students were not capable of growth, but this bubble was burst as he observed their growth over time; he learned to tolerate or accept them, while managing his own responses to discrimination. Mairi developed leadership and advocation skills which she used to tackle the impacts of inequality. Neither described learning directly from their more privilege peers. This raises questions about whether aspects of the gateway programme effectively prepare students for their interactions with students from more privileged backgrounds, or perhaps approach interactions with an openness to learning and growth. This would be an interesting direction for further study, with an emphasis on how a growth mindset can be facilitated across the wider cohort.

Two stories powerfully illustrate how increasing diversity through WP facilitated Legitimising Difference: Sade’s and Rishi’s (both BM5). Sade, for example, a Black BM5 student, described the cultural majority of students who drank and partied as “medics”, excluding her from socialising and limiting her ability to identify as a “medic”. Although increasing the cultural or ethnic diversity of medical cohorts is not an aim of BM6 (see the BM6 eligibility criteria in 5.3), BM6 does recruit a greater number of Black students than the BM5 programme: 22% of BM6 students are Black compared to 3% of BM5 students. BM6 therefore plays an important role in creating a more ethnically diverse medical cohort, indicating a greater need for medical schools to recognise intersectionality in their admissions processes. Befriending BM6 peers through the student committee for racially and ethnic minority students helped Sade, a BM5

student, to create a community of medical students with shared experiences and interests, which increased her sense of belonging and legitimacy as a medic. Sade's narrative illustrates some of the implications of (unintentionally) increasing ethnic diversity through the BM6 programme for the educational experiences of all medical students, particularly for those, like Sade, whose ethnicities are underrepresented on the direct-entry programme.

Similarly, befriending BM6 students who had caring responsibilities part-time work helped to legitimise Rishi's experiences, which he had expected to be unique and abnormal. Students who enter medicine via WP routes often have these additional responsibilities[171,179,180,259], although the level of additional support they can receive in recognition of these additional commitments can vary. Surrounding himself with students with shared experiences was powerfully transformative for Rishi, bursting his bubble about who could be a medic, and helping to secure his identity as a medic who belonged and had valuable contributions to make to his peers. Tariq's concerns about not belonging in medical school were also allayed through meeting more socially and ethnically diverse students than he had expected to see in medical school. Sadly, this was not the case for Aaliyah, who described herself as a cultural minority within a minority in the BM6 programme, and struggled to 'fit in' with both BM6 and BM5 students.

8.4.4 Practical recommendations from this study

Celebrate diversity and difference: who can be a medic?

The findings of this study support and enhance the key message from the focus group findings presented in Chapter 7: medical students value interacting with students from different backgrounds and believe that their learning and social experiences are enriched through cohort diversity. Yet, in the UK, positive, social accountability discourses about WP and diversity are strikingly absent from institutional messages[2,72] (see also -1711941184.454.816707). In their absence, discourses of social mobility create perceptions and expectations of deficiency, leading SURGs like Priya (G2M) and Rishi (BM5) to suffer from low self-esteem, while students like Aaliyah (BM6) and Niall (non-G2M) are subjected to discrimination from elitist peers.

Even participants who experienced negative interactions with peers from different backgrounds felt that, in the long term, the outcomes were positive. For Aaliyah (BM6), experiencing marginalisation and discrimination encouraged her to become a stronger

and more empathic advocate for vulnerable patients; Niall (non-G2M) reflected that he developed valuable coping mechanisms, such as compartmentalising, tolerance and resilience, which would help him to provide better more focused care to all patients. Both of these participants expressed some resignation that discrimination was an inevitable part of being a medical student from working-class origins, and could eventually be framed as positive learning opportunities. But are microaggressions and discrimination really necessary triggers for achieving these outcomes? Or could celebrating diversity and difference help all students to understand, accept and legitimise difference at an earlier stage of their education, and minimise these harmful incidents? Even acknowledging different experiences and commitments, for example by promoting additional support for students with caring responsibilities, would discursively demonstrate that the institution value the contributions these students can bring to their classrooms and help to normalise these experiences.

This study highlights that many SURGs enter medical schools believing that they are less suitable than others to be a 'medic'; there is an assumption that they will have to work harder to succeed, while for 'Others', the journey to success is taken-for-granted. As the CDA in Chapter 6 revealed, medical schools perpetuate this discourse by foregrounding the importance of academia when celebrating the success of SURGs (UoS), or by implying that SURGs require transforming to become suitable to study medicine (UoA). This reveals an exciting opportunity for medical schools to transform their discourses: to promote a broader set of expectations about what a 'standard' student is or how they should behave, and valorise a diversity of life experiences, skills and qualities in all the medical-degree entry routes. If medical schools were to promote and celebrate the potential for doctors to come from a much wider variety of backgrounds, this could minimise related incidences of external discrimination and internal imposterism.

To truly communicate "value" of this diversity, medical schools must also be better prepared to accommodate differences: SURGs from WP backgrounds are more likely to be more impacted and more significantly affected by challenging external circumstances, which make their journeys through current medical school systems more complicated. If medical schools are to truly acknowledge, embrace and value diversity, they must abandon the notion of accommodating diversity within current notions of merit[260]. To begin this crucial undertaking, all stakeholders in medical education must be prepared and equipped to have sensitive, vulnerable and deeply uncomfortable conversations about diversity and difference.

*Institutions must recognise and uphold their responsibilities to support **all** students to thrive*

Sade's ethnicity (Black African) significantly impacted her experiences as a BM5 student interacting with other students in medical school. Rishi was a first-generation immigrant, mature student with caring responsibilities. BM6 students undertake their first year of medicine as part of a group in which these identities are far more represented than on the BM5 programme. Consequently, BM6 students have more opportunities to develop friendships with students 'like me'. Workshops in Year 3 provide opportunities for BM6 students to network and share experiences with BM6 students in older years and BM6 graduates[166]. They receive guidance on transition and many establish trusting relationships with medical school staff in Year 0 which are enabled by the small cohort and workshops[166]. Although ethnicity will influence the experiences of ethnically diverse BM6 students, there are many supportive networks and systems integrated into the programme designed to support students experiencing challenges like Sade's, while Sade felt the responsibility to improve her experience rested heavily on her own shoulders.

Although both Sade and Rishi are SURGs in the UoS medical schools, both were educated in selective schools: Sade was privately educated, Rishi went to a grammar school. This provides an opportunity to consider the impact of schooling in terms of medical school experiences. Although both Sade and Rishi were anxious about fitting in at medical school because of their aforementioned differences from the majority of their cohorts, neither expressed a need to *change* themselves in order to fit in or succeed in medicine. The same cannot be said for the BM6 students. Aaliyah described how the discrimination she experienced from peers at medical school led her to change her behaviour with patients, to make her patients more comfortable with her difference (although, as I have suggested, this may subconsciously function to protect herself from similar discrimination from patients). Although Tariq explicitly claimed that his BM6 Y0 experience assured him that he didn't need to change himself to be suitable for medicine, he observed and made a notable effort to improve his communication skills based on the communication standards he observed amongst his privately-educated BM5 peers. Both BM6 students focused on how the changes they were consciously making would improve the experiences of their patients. BM5

students Rishi and Sade, on the other hand, emphasised creating communities or finding companions with whom they could continue to be their authentic selves.

While it is impossible to make any claims about these differences based on such a small sample, it indicates the need for a deeper exploration of this finding: how important was schooling in conferring on Sade and Rishi that they should remain true to themselves? Were Tariq and Aaliyah told by others, as many BM6 students have (anecdotally) reported, that they need to act differently to be a 'proper' doctor? To what extent can Aaliyah and Tariq's changes in behaviour be considered assimilation, rather than professionalism?

Diversity and inclusion are increasingly recognised as a core marker of excellence within academic medicine, rather than as a 'problem' which requires 'fixing'[182,192]. Most medical schools (not just those included in this research) are therefore investing significant resources to attract diverse medical student cohorts[72]. However, current efforts to adequately support and retain them are not sufficient, evidenced through reports of discrimination and data highlighting the persistent awarding and continuation gaps[35,39,40,224]. Institutions must recognise their obligations to students to create safe environments in which all students have equal opportunities to thrive. Much more work is needed, and this must include efforts to create culturally safe spaces in which staff and students can have conversations about diversity and difference, and for institutions to honestly and critically examine their existing practices which perpetuate inequalities.

Participants in this study enjoyed the opportunity to talk freely about diversity, difference and to have the space and encouragement to reflect on how learning with others had burst their bubbles. Too often, expressions of and discussions about difference can be uncomfortable and are often avoided, meaning that medical students and educators may not optimally benefit from the rich knowledge and insights that diverse students can contribute because of their backgrounds.

Currently, medical educators are not adequately trained in understanding the vast, complex and intersecting diversity issues experienced by their students, or prepared to build the foundations of trust and confidence to safely and effectively facilitate constructive conversations[120]. Some can feel threatened or daunted by the prospect; the first step of acknowledging your own privilege can create vulnerability[8,253,261,262]. Medical schools must prioritise, fund and support staff training on diversity and reflexivity. Ideally, this would form part of a wider package of training and research which empowers all university staff to identify, examine and challenge current

institutional policies, systems and practices which are enabling or overlooking the microaggressions and discriminations faced by some students. The responsibility for tacking inequality should not fall to students like Sade (BM5), or Mairi (non-G2M), whose interactions with students from different backgrounds catalysed their recognition of systemic inequalities and their decisions to take on the burden of tackling these *institutional* obligations.

8.4.5 Limitations and recommendations for further research

Qualitative researchers acknowledge that our social worlds are immensely complex and messy. The outcomes of diversity reported by participants in this study, like transformed worldviews and enhanced cultural competence, are based entirely on self-report. It would be almost impossible to quantitatively measure how these self-reported skills and views changed as participants progressed through medical school, and entirely impossible to attribute any changes to single causes of interactions with other students, or compare findings between institutions with different student demographics and attribute causation. However, a longitudinal approach to researching this topic could enhance the understanding and rigour of studies like this. For example, further studies could examine whether participants continue to reflect on what they learned from their interactions with peers at medical school as they progress into the profession and are increasingly accountable for patient outcomes. Or, do processes of standardisation and professional expectations may exert stronger influence and disrupt the potential to benefit from diversity, as Frost and Regher have suggested[97]?

Stories, like those told by my participants, are not accurate representations of events, but versions constructed by individuals to align with their ways of viewing the world. Participants are motivated to present themselves in particular ways, often seeking to present their behaviours in accordance with their desired identities, and their narrative recounts may thus lack accuracy[206]. This may be particularly pertinent for a study on diversity with a cohort of future doctors, who are required, professionally, to present themselves as tolerant, accepting and reflexive individuals. In other words, participants may be motivated to say what they think they should say, rather than how they really feel. I sought to mediate the impact of this through linguistic analysis, by examining how participants spoke as well as *what* they said.

While not a significant limitation of this study, it is worth reiterating that the purpose of narrative methods is to provide nuanced and detailed illustrations of a small number of individual experiences which are highly contextualised, rather than identifying generalisable themes from a larger number of participants that some may perceive as more useful for producing practical recommendations[206]. The depth and rigour required for narrative analysis limited the scope of this study: given the opportunity, I would expand this study in several ways. For example, I would ensure that some of those missing voices of more 'traditional' medical students were captured (discussed more below), and adopt a longitudinal approach by re-interviewing participants as they progress through the profession to examine whether they retained their new worldviews and could reflect more deeply on the impact of student diversity in their medical practice with patients.

Moreover, the deep emphasis on participants individual contexts and small participant numbers made it difficult to do a cross-case comparison. I identified few notable differences between the UoS and UoA participants, except that 'diversity' was discussed more broadly by UoS participants (including ethnicity and experience of caring), while UoA participants mostly discussed issues of classism.

At the outset of this research, I had planned to draw on Mezirow's theory of Transformative Learning to examine the impact of interactions between medical students from different backgrounds[256]; however, as the impact of WP in medical schools was a relatively novel research area, I opted for a more exploratory approach to avoid the potential of constraining or reducing what could be learned. So, while it was not possible to adopt the theoretical framework of Transformative Learning within this research, these findings support further exploration of whether increasing diversity through WP triggers Transformative Learning (in line with Mezirow's framework, or other conceptual lenses) in medical schools.

Participants

A significant, and unexpected aspect of this study, which could be perceived as a limitation, is that the voices of students whose identities are over-represented in medical schools are notably missing: those who are White, wealthy and come from families with experiences of HE and medicine. Only one participant identified as White (62% of UoS and 63% of UoA medical students are White), and six of eight participants described some experience of growing up in significant socioeconomic deprivation.

Initially, I had hoped to compare the voices and experiences of students on gateway programmes with the perceptions and experiences of those who are typically over-represented in medical schools. There could be many reasons for the lack of interest and participation of these students, such as the impact of Covid-19 in limiting recruitment strategies to online posters which could be easily overlooked (compared to in-person recruitment, which attracted significantly more prospective participants in the focus group study). Another significant factor is self-selection bias: those who see themselves as diverse or different may be more alert to and interested in talking about diversity and difference. It is also possible that my participants were more self-aware and reflective about diversity and difference in their education than the majority of the cohort, enabling our conversations to be, perhaps, richer and more fruitful explorations of the topic, leading to exaggerated and biased findings compared to what might have been identified from interviews with a more representative sample of medical school students.

At the UoS, I advertised to recruit students who did not self-identify as being eligible for the BM6 programme, which require students to meet three of the eligibility criteria. Sade and Rishi were the only BM5 students who volunteered to participate after three attempts to recruit. At the UoA, I received multiple expressions of interest for participating in my study. All prospective participants confirmed by email that they did not meet G2M eligibility criteria, and I used a random number generator to select those who did participate, and only recognised Niall and Mairi as SURGs when they submitted their demographic data sheets just before our interviews. With limited time remaining to collect and analyse data, I accepted that this was a necessary limitation of the current study.

8.5 Conclusion

Interacting with students from different backgrounds during medical school burst participants' bubbles about the world. Interactions facilitated epiphanies which helped students to accept and legitimise difference, and appreciate the importance of diversity within education and healthcare settings. However, interactions and experiences of diversity can be fraught with difficulty and misunderstandings, and the journeys to transformation can be painful. SURGs who do not enter medical school via a gateway programme can feel unsupported, unheard and marginalised throughout this process. Transformative medical education requires educators to become aware of these

tensions, and to be held responsible for bringing hidden discourses of diversity and difference to the surface to be safely discussed, explored and resolved. Institutions can also support this by promoting different kinds of excellence, helping students to recognise the value of difference through institutional culture rather than relying on students to privately reflect on their interactions and learn from them. Medical schools should be held socially accountable to their students and to society by truly embracing and celebrating diversity among their students.

Chapter 9 Overall discussion

"*And it does burst your bubble. We all have different views, and you learn things from people from different backgrounds*" (BM5 Y1)

In this final chapter, I begin by recapping the rationale and methodology behind the research, before briefly summarising the findings of the three main research questions. I conclude this thesis by highlighting its key contributions, limitations of the research design and recommendations for future research and practice in the field.

9.1 Rationale and methodology

Previous research has focused on how SURGs experience university and how they are perceived by others in HE in general[22,23,32,33], which may not be applicable to the medical student experience. Quantitative research within medical education has shown that cohort ethnic diversity is generally valued and appreciated by medical students[85,89], and other researchers have explored how SURGs experienced their early years of medical school on a standard-entry degree[59,62,63]. There was a lack of in-depth, nuanced understanding of how WP, which increases diversity across a broader range of demographic factors than ethnicity alone, is perceived and experienced within the UK medical school context, or how the experiences of gateway students may be different to SURGs who enter medicine directly. Extant studies about gateway to medicine programmes[71,81] have not considered how different approaches to running a gateway programme might mediate students' experiences.

The aim of this PhD was to understand how increasing diversity through WP is understood and experienced in the UoS and the UoA medical schools, which approach WP through different types of gateway programmes. I employed three key research questions:

1. *How are widening participation and students from underrepresented groups presented on the gateway programme webpages?*
2. *How are widening participation and students from underrepresented groups perceived by medical school staff and students?*
3. *How can interactions between students from different backgrounds influence students' experiences during medical school?*

The research was guided by a social constructivist paradigm, emphasising my belief that both research knowledge and students' learning are co-constructed through interactions with others. Using a multiple case study, I developed an in-depth understanding of the two cases: the UoS and UoA medical schools. I interpreted findings of the main research questions in light of their respective contexts.

9.2 Summary of overall findings

In Chapter 5, I showed that the demographics of the overall student cohorts at the UoS and UoA were broadly similar. The gateway programmes offered at each institution differed significantly in terms of their structure (6-years versus 1-year), which symbolise different understandings of the purpose, requirements and value of WP. BM6 has been running for much longer than G2M, with multiple cohorts successfully graduating from the programme and matriculating into the profession, while G2M is relatively new. While both programmes recruit students from low-income families, G2M also recruits students from rural and remote areas of Scotland.

In Chapter 6, I examined how WP and SURGs were constructed by the medical schools through a linguistic analysis of text on the gateway programme websites. The UoS webpages implied that WP was undertaken to fulfil external regulatory requirements but challenged the deficit discourse by foregrounding the successes of previous BM6 cohorts. At the UoA, WP was presented as important and valuable, but the strong discourse of G2M as transformative implied that SURGs require changing to become suitable for studying and fitting in to medicine.

Both institutions presented WP as a necessary 'bolt on' to existing institutional provision, rather than as an approach to reviewing and adjusting existing provision to be more accessible and inclusive to SURGs. Neither institution explicitly communicated how the medical school or profession benefit from increasing student diversity though WP. The webpages conveyed that the institutions had different beliefs about the purpose of WP, and SURGs were constructed differently.

Chapter 7 presents my Thematic Analysis of focus groups with medical school staff and students to get a broad view of how WP and SURGs are perceived by members of the institutions. Participants at both institutions held broadly similar views about WP in general, perceiving it as a valuable mechanism for creating social mobility and adding

value to students' learning and to healthcare provision. Interactions between students from different backgrounds were thought to:

- **Burst Bubbles:** challenge taken-for granted worldviews, stereotypes and ways of thinking
- **Enrich all student learning:** through cultural knowledge exchange and diversifying curricula
- **Enhance cohorts' soft skills:** communication, teamwork and problem-solving with 'Others'
- **Facilitate recognition of own strengths:** seeing differences enables students to appreciate their unique contributions to medicine

However, SURGs were perceived in different ways at the two institutions, which affected the integration and feelings of inclusion experienced by gateway students. Most UoS participants described infrequent interactions with students from different backgrounds, while UoA students questioned whether hearing about a different background could result in a level of understanding of a different lifestyle that would be sufficient to influence or enhance medical practice.

I sought to explore the contradiction between the perceptions and integration of SURGs and the perceived outcomes of increasing diversity by holding narrative interviews with 8 students (4 gateway and 4 direct-entry) about how their medical school experiences had been affected by their interactions with students from different backgrounds. Although each participants' journey to and through medical school was unique, three types of interaction facilitated their processes of learning from each other:

Observing Others' Worlds: gaining valuable knowledge and insights from simply being exposed to (rather than having any notable interactions with) students from different backgrounds

Unexpected Friendships: with someone from a very different background who significantly shaped their perspectives

A Moment with an 'Other': which highlighted individual and societal differences and prompted reflection and social learning

The outcomes of these interactions and observations, such as feeling legitimised as a medical student in a cultural minority or learning to put differences aside, were not

realised instantly. Participants reflected on their interactions and observations of difference both privately and during our interviews, and as they tried to make sense of them, variably experienced the following realisations:

1. **Increased awareness of difference:** most participants were surprised by the broad spectrum of differences in lifestyles and experiences of their peers, and came to recognise the narrow 'bubbles' of their own previous life experiences and understanding of the world. Differences between students were often construed as making others unrelatable and were seen as barriers to integration.

2. **Legitimising difference:** participants began to accept difference, even when they didn't understand it. Some participants learned that their own differences from the cultural majority were acceptable within medicine and could even enhance others' learning. Recognising their differences as strengths facilitated a belief that they could succeed and become legitimate medics. Some participants developed empathy and understanding of others, and realised how 'Others' upbringings had shaped the negative behaviours and attitudes that had impacted early interactions, but learned that these individuals were capable of growth.

3. **Bursting bubbles:** through interacting with other students, participants examined, challenged and often transformed some of their strongly held beliefs. This often led participants to not only accept difference, but to value it.

Using a multiple case approach allowed me to explore the significance of context: for example, the structure of gateway programmes affected how WP was perceived and experienced by staff and students. Throughout this thesis, I have compared the findings for each individual institution in relation to contextual differences, magnifying differences between them, thereby illuminating the powerful impact of context on outcomes of WP in medicine, which are too often unexamined and invisible in this field[157].

9.3 Key contribution of this thesis:

9.3.1 Brings to the surface a backgrounded discourse of WP as beneficial

Linguistic analyses of UK policy[2] and medical school webpages[72] have shown that WP is most widely promoted as a tool for supporting individuals to achieve social mobility, for the 'disadvantaged' to become more advantaged[1,2,263]. That is, the benefits of WP flow in a singular direction from the generous institutions to the implicitly deficient students[72]. Not only does this disguise that the need for WP arises from inequalities in the education systems (rather than the individual SURGs who benefit from WP provision), it also undermines the value and benefits of diversifying university cohorts. Consequently, the dominant social mobility discourse of WP serves to maintain the power imbalances that WP seeks to address, and enables universities to circumvent their responsibilities to critically review and challenge practices which create systemic inequalities[8].

This research provides evidence showing that the benefits of WP and increasing diversity are reciprocal, with myriad benefits of increasing diversity flowing towards all students, the institution, and the profession. Exposure to and interaction with students from different backgrounds "*burst my bubble*". Student participants typically described arriving at university in a bubble; their knowledge and understanding of the world was built upon their own limited experiences, which they had shared in a vacuum of people who often thought, looked and understood the world in a comfortingly similar way. Once enrolled in their medical school, their interactions with a diverse cohort of students increased their awareness of how life experiences and worldviews could be different. This awareness catalysed an often powerful, transformative process of reflecting on, questioning and often reconstructing their previously held beliefs. Examples of transformed beliefs include legitimising different ways of being a good medic and collapsing a perceived social hierarchy. By seeing difference, participants came to recognise the strengths and value that they brought to medical school, such as communication skills and forms of cultural and experiential capital that were often missing from their classrooms.

Many participants came to recognise the biases they brought to medical school, the assumptions they made about others (or the 'bubbles' they put them into) based on superficial differences, which they initially dismissed as "*unrelatable*". As they became familiar with 'Others', and shared experiences with them as they progressed through medical school classrooms and into the novel and complex worlds of the wards, they realised that other people were just *people*. Their differences need not be barriers. Through their reflexive journeys of medical school and of our interview, my participants'

stories illustrate how interacting with students from different backgrounds can facilitate an openness to learning, connection and growth that could powerfully enhance their capacity to empathise and care for their future patients.

In the focus groups, many participants discussed learning from their peers about other cultures, including becoming more sensitive to religious beliefs which might affect clinical interactions with patients. While there is a concerning potential for such insights to become generalised, most participants reflected that the cultural insights they learned from other students helped them to become more open-minded and critical of their tendencies to make assumptions. One example of this is the UoS student who recognised that case studies in problem-based-learning tasks could be problematically White-centric, and was developing their ability to question and challenge the colonisation in their curriculum.

Most research advocating the potential benefits of diversity, including most of this study, focuses on the insights and forms of capital that SURGs can bring into the classroom[85,89,96] and the medical profession[122]. This is undeniably important given that their insights may have historically been excluded or marginalised, and as I have argued throughout this thesis, these benefits must be more widely promoted and celebrated. While I have endeavoured to undertake my research critically and identify and challenge my own beliefs, my position on this issue has been transparent: I believe that SURGs possess and can, within a culturally safe space, contribute novel insights and perspectives on medicine, the social determinants of health and cultural capital. Perhaps due to my own identity, which is more akin to the 'traditional' medical student, I had not really considered the kinds of insights and cultural knowledge that students from the cultural majority could share with SURGs. What could someone like me really have to offer; surely everything I know about the world is obvious?

Some participants' narratives illuminated worldviews which were novel to them, but which I had taken for granted. The insights Maduka gleaned from observing more privileged students engaged in extracurricular activities encouraged him to try new things, and he experienced significant personal growth which he valued deeply. Tariq's story is a powerful example of the potential for reciprocity of cultural knowledge exchange; learning from students whom he described as more privileged about the centrality of mental wellbeing as a component of health was transformative for him. As his story illustrates, this cultural knowledge exchange has incredible potential for his capacity to provide care within the context of his home community.

9.4 Critical reflections on the research design

Each research strand contains a discussion of limitations specific to the particular methods used (Chapters 5, 6, 7 and 8). In this section, I reflect on limitations of the overall research design.

9.4.1 Case study institutions

Situating the findings of my research within the contexts of the UoS and UoA medical schools helped me to consider deeper and nuanced interpretations than would have been possible using decontextualised data. This is a key strength of the research. However, if it had been possible to widen the scope of the study, it would have been valuable to undertake this research with a third institution which doesn't currently offer a gateway to medicine programme. Other approaches to WP such as bursaries and contextualised admissions are more "hidden" methods of increasing cohort diversity while maintaining existing, inequitable models of medical education. This may have implications for how WP is perceived and whether medical school staff and students are aware when they are interacting with students who has entered through a WP pathway. Such findings would also expand the existing literature on the experiences of SURGs on standard-entry programmes[59,62,63].

9.4.2 So… which type of gateway programme is better?

This is the most common question I have received about my research. Staff and students at both the UoS and UoA offered convincing arguments for their institutions' approach to the gateway programme, but I cannot use my findings to answer this question.

One reason is the use of a constructivist paradigm. In this research, I sought to explore perceptions of and the lived experiences of the impact of WP, and how those outcomes are realised within the contexts of two medical schools. Using a case study approach enabled me to examine patterns and suggest, but not prove, possible causes for the differences in perceptions which I identified. To determine which type of gateway programme is "best", I would need a set of credible criteria for measuring the quality of gateway programmes against which my findings could be judged. A critical realist paradigm (alongside access to recent and reliable student data) would be more appropriate for addressing this type of research question[148]. However, there is a risk that such a question would promote a reductionist and oversimplified conceptualisation

of WP and gateway programmes. For example, attainment is commonly used as a measure of success of gateway programmes or assessing the effectiveness of medical school selection tools, but is being a good doctor simply about passing exams? WP is perhaps better understood as a "wicked problem": a multicausal, complex and dynamic social problem which foregrounds context and stakeholder views as paramount[263]. Unfortunately, there are no simple solutions.

Constructivism is underpinned by a worldview that social phenomena are situated in their historical, social and political contexts. Findings from one or two institutions cannot be directly extrapolated and neatly applied into another context, so I cannot make any claims about what policies or practices would serve a particular medical school and its students better than others. Rather, my research highlights the need for medical educators to reflect on what *they* believe is the purpose of WP and review whether these beliefs align with the institutional discourses, policies and practices in their own contexts.

9.4.3 Distinguishing the impact of WP from the impact of diversity

One issue I continuously negotiated throughout this research is disentangling the perceived impact of WP and gateway programmes, which have specific entry criteria, from perceptions about the impact of diversity in student cohorts more generally. For example, the BM6 eligibility criteria do not include ethnicity nor culture, yet focus group participants spoke extensively about the benefits of having students from a wide range of ethnicities and cultures in their classroom. The issue became even tricker when I realised that participants might mistakenly use ethnicity as an indicator of BM6 programme membership: a group of Black BM5 participants in the focus group study told me they had been mistaken for BM6 students on several occasions.

While increasing ethnic diversity is not an intention of WP through gateway programmes, it is one of the outcomes: BM6 cohorts are much more ethnically diverse than their equivalent BM5 cohorts. This highlights the intersectionality of demographic markers at play in all WP research. Typically, research on the experiences of 'WP students' has recruited participants and examined data based exclusively on single demographic markers like FiF status[59,62,63], income[264] and class[61], which risks undermining or marginalising participants' other identities. So, while I did try to contextualise my findings in relation to WP criteria and gateway programme

membership, I prioritised being open to and acknowledging the multiplicity of diverse identities that my participants discussed in relation to WP and their peers on the gateway programmes, rather than stipulating that some of their perceptions and experiences were more valid and valued than others.

9.4.4 Biased participants

As with most research, it is highly likely that my participants represent a biased sample. Volunteers are likely to be those with an interest in the topic, who may have already reflected on the research question advertised and feel that they have a valuable contribution to make, as opposed to those who are not aware or interested in WP and diversity. Moreover, there is always a risk of 'social desirability bias', in which participants offer responses to questions which they perceive as socially acceptable, even if they do not believe them. Similarly, participants with a vested interest in WP (such as staff who are involved in running the gateway programme), might share exclusively positive experiences while neglecting to disclose negative interactions.

It is thus important to acknowledge the multitude of experiences and voices which are not included in the findings of this research. This is likely to include those who discriminate against SURGs and those who actively reproduce a deficit discourse, whose perspectives could contribute to a more rounded and robust understanding of WP. While I attempted to minimise this risk by using neutral language in recruitment materials and research questions, and by committing to protect participants' identities, I am aware that my findings do not represent a complete picture of the multiple discourses, perceptions and experiences of WP at the UoS and UoA medical schools during this time.

9.5 Recommendations for future research and practice

Participants in this study believed that their interactions with students from diverse backgrounds impacted their experiences of medical school, shaping their future practice as a doctor. To what extent are those insights and skills retained and enacted as students matriculate into the profession? Do the discourses of standardisation mitigate the potential impact of learning from diversity, as some UoA participants suggested? Or do the cumulative effects of observing, interacting with and forming unexpected but meaningful friendships with students from different backgrounds

translate to tangible impacts on practice? Future studies should prioritise longitudinal approaches to research and explore the narratives of medical graduates reflecting on their professional practices.

In this research, I identified discursive tensions in the ways that WP and SURGs are constructed in institutional literature and how they are perceived and experienced by teaching staff and students. Medical schools should critically review how they construct WP and SURGs in their webpages and prospectuses. They must recognise their power to shape discourses about WP and SURGs, how these messages might be received by their diverse prospective audiences, and the implications of WP discourses for access, inclusion and participation. At the very least, medical schools should ensure they are not promoting discourses of deficiency. If medical educators believe that increasing diversity through WP enhances all students' experiences in their medical school and positively impacts future healthcare provision, then their institutional discourses should reflect this.

There is a disparity between the requirements of the medical profession in our current multicultural society and the pervasive culture of academic elitism within medical education, which tends to background social dimensions of learning. The findings of this research showcase the myriad benefits to learning when medical students have opportunities to observe, interact with and exchange knowledge with students from a wide variety of backgrounds. Although academic performance is certainly important in medical education, this research draws attention to the diversity of skills, experiences and knowledges that medical staff and students view as essential components of a quality medical education, but which are not recognised in current conceptualisations of merit and excellence in medicine[10]. We must make the benefits (and their significance) of increasing diversity through WP on medical education explicit. The findings of this research could be used to prompt discussions between medical educators to review and reconstruct markers of excellence in their medical schools which align with their desired societal outcomes.

The findings of this research should be used as a basis for staff development sessions to raise awareness of the value and experiences of widening participation and increasing diversity on the educational experience of all students. The sessions should be delivered by the institutions involved in this study but would also be informative for other institutions. The findings could support medical educators and clinicians to develop a greater understanding of the value of increasing student diversity on all students' educational experiences. The findings are valuable for those involved in

curriculum design, development and delivery to ensure they are optimising the wide range of cultural capital students bring with them to medical school. This includes understanding how students interact throughout their time at medical school, possible triggers for Othering and stigmatisation as well as how and when they feel a shared identity. Understanding how the course structure impacts on a sense of belonging will help ensure optimal transition and integration for students helping them to develop a sense of belonging and identity while retaining their uniqueness and individuality.

9.6 Concluding remarks

I thoroughly enjoyed the opportunities that this research provided for me to engage in deep and meaningful conversations with an incredible spectrum of individuals, who shared with me a passion for social justice, medicine and learning from others. In all the conversations I had with my wonderful participants, it was very clear that students and staff alike enjoyed, valued and appreciated the opportunity to discuss diversity and difference in a safe space: one participant even described our conversation as "therapeutic". While I would strongly recommend making opportunities for these important conversations in medical curricula, it must be done with caution and sensitivity. Medical students and staff may be willing and able to fruitfully discuss diversity and learn from others' experiences, but doing so without adequate support and guidance poses obvious risks, particularly for those whose identities may be marginalised and for whom the inherent power dynamics may create vulnerability.

On the other hand, when discussions about diversity and difference are avoided, a lack of understanding and pressure to dismiss differences as meaningless, while well intended, can undermine and devalue lived experiences and reproduce inequalities. The discomfort and defensiveness which we all experience when discussing topics like racism, classism and Othering can mean these issues loom as 'the elephant in the room', and students from different backgrounds are less likely to interact and find common ground. Building trust and creating culturally safe spaces for open discussions are a crucial first step that medical schools must take. Ideally, opportunities to have these conversations would be offered as part of a broader programme of mandatory intersectionality and reflexivity skills training[261].

When effectively facilitated, conversations around diversity and difference may help to bring these tensions to the surface, offering the potential to break down barriers and build bridges between students from different backgrounds. My participants' stories powerfully illustrated that positive interactions between diverse students can "burst bubbles" around issues of classism and inequality both within and beyond the medical classroom. Moreover, the reflexive journeys they undertook in the process of our focus groups and conversations strengthens the claims of previous research suggesting that the integration of non-traditional students could enhance the development of valuable professional skills including critical thinking and reflexivity.

Finally, I want to reiterate that although not all the interactions between students from different backgrounds shared by my participants were positive, and some were even

unpleasant, all participants still championed WP in medical schools, and described the transformative impacts of diversity on their experiences. The benefits of increasing diversity through WP must be widely promoted to eradicate harmful discourses of deficit and promote a culture that celebrates the diversity of insights, experiences and skills that are necessary to provide high-quality healthcare in our multicultural society.

References

1. Archer L, Hutchings M. 'Bettering yourself'? Discourses of risk, cost and benefit in ethnically diverse, young working-class non-participants' constructions of higher education. *British Journal of Sociology of Education* 2000;21(4):555-74.
2. Coyle M, Sandover S, Poobalan A, et al. Meritocratic and fair? The discourse of UK and Australia's widening participation policies. *Medical Education* 2021.
3. Ford R. Ethnicity labels are divisive, says Phillips. *The Times*.
4. Malik S, Ryder M, Marsden S, et al. BAME: A report on the use of the term and responses to it. Terminology Review for the BBC and Creative Industries: Birmingham City University.
5. Connell-Smith A, Hubble S. Widening participation strategy in higher education in England: House of Commons Briefing Paper, 2018.
6. Nicholson S, Cleland J. Reframing research on widening participation in medical education: using theory to inform practice. In: Cleland J, Durning S (eds.) *Researching Medical Education*. UK: Wiley; 2015 p231-43.
7. Nicholson S, Cleland J. Reframing research on widening participation in medical education: using theory to inform practice. In: Cleland J, Durning S (eds.) *Researching Medical Education*: Wiley-Blackwell; 2015 p231-43.
8. Curtis S, Mozley H, Langford C, et al. Challenging the deficit discourse in medical schools through reverse mentoring-using discourse analysis to explore staff perceptions of under-represented medical students. *Bmj Open* 2021;11(12).
9. Alexander K, Cleland J, Nicholson S. Let us not neglect the impact of organizational culture on increasing diversity within medical schools. *Perspectives on Medical Education* 2017;6(2):65-67.
10. Razack S, Risor T, Hodges B, et al. Beyond the cultural myth of medical meritocracy. *Medical Education*:8.
11. Dearing R. Higher education in the learning society. London, 1997.
12. Advance HE. Equality in higher education: statistical reports 2021. https://www.advance-he.ac.uk/news-and-views/equality-higher-education-statistical-reports-2021, 2021.
13. Turhan C, Stevens S. PATHWAYS FOR POTENTIAL: A roadmap for tackling educational inequality and improving access to Higher Education, 2020.
14. Office for Students. *Access and participation glossary*.
15. HESA. *Who 's studying in HE?*
16. Lasselle L. Barriers to higher education entry - a Scottish rural perspective. *Scottish Educational Review, Spcial Edition: Widening Access to Higher Education in Scotland* 2016;48:78-88.
17. Reay D. The working classes and higher education: Meritocratic fallacies of upward mobility in the United Kingdom. *European Journal of Education* 2021;56(1):53-64.
18. Department for Education. Impact of the student finance system on participation, experience and outcomes of disadvantaged young people, 2019.
19. Department, Skills. fBIa. Socioeconomic, ethnic and gender differences in HE participation, 2015.

20. Broughton N, Ezeyi O, Hupkau C, et al. Open Access: An Independent Evaluation, 2014.

21. O'Shea S, May J, Stone C, et al. *First-in-family students, university experience & family life: Motivations, transitions and participation*: Palgrave Macmillan; 2017.

22. Reay D, Crozier G, Clayton J. 'Fitting in' or 'standing out': working-class students in UK higher education. *British Educational Research Journal* 2010;36(1):107-24.

23. Reay D, Crozier G, Clayton J. 'Strangers in Paradise'? Working-class Students in Elite Universities. *Sociology-the Journal of the British Sociological Association* 2009;43(6):1103-21.

24. Oikonomidoy E. Sociocultural Boundary Formations in College Life and Intercultural Capital Development. *Education and Urban Society* 2015;47(1):109-27.

25. Reay D. Working class educational transitions to university: The limits of success. *European Journal of Education* 2018;53(4):528-40.

26. Coulson S, Garforth L, Payne G. Admissions, adaptations and anxieties: Social class inside and outside the elite university. In: Waller R, Ingram N, Ward M (eds.) *Higher education and social inequalities: University admissions, experiences and outcomes*. Abingdon: Routledge; 2018 p3-21.

27. Talebi M, Matheson K, Anisman H. Does being first in family matter? The role of identity in the stigma of seeking help among first and non-first in family university students. *International Journal of First Year Higher Education* 2013;4(1):47-58.

28. Atherton MC. Academic Preparedness of First-Generation College Students: Different Perspectives. *Journal of College Student Development* 2014;55(8):824-29.

29. Reay D. Finding or losing yourself?: working-class relationships to education. *Journal of Education Policy* 2001;16(4):333-46.

30. McMillan W. 'They have different information about what is going on': Emotion in the transition to university. *Higher Education Research & Development* 2014;33:1123-35.

31. Read B, Burke PJ, Crozier G. 'It is like school sometimes': friendship and sociality on university campuses and patterns of social inequality. *Discourse-Studies in the Cultural Politics of Education* 2020;41(1):70-82.

32. Crozier G, Burke PJ, Archer L. Peer relations in higher education: raced, classed and gendered constructions and Othering *Whiteness and Education* 2016;1:39-53.

33. McKay J, Devlin M. 'Low income doesn't mean stupid and destined for failure': challenging the deficit discourse around students from low SES backgrounds in higher education. *International Journal of Inclusive Education* 2016;20(4):347-63.

34. Beagan BL. Everyday classism in medical school: experiencing marginality and resistance. *Medical Education* 2005;39(8):777-84.

35. Richardson J. Understanding the Under-Attainment of Ethnic Minority Students in UK Higher Education: The Known Knowns and the Known Unknowns. In: Arday J, Mirza H (eds.) *Dismantling Race in Higher Education*: Palgrave Macmillan; 2018 p87-102.

36. Office for Students. Access and participation data dashboard: sector-level data. https://www.officeforstudents.org.uk/data-and-analysis/access-and-participation-data-dashboard/: Office for Students, 2021.

37. Advance HE. Equality in Higher Education, Student Statistical Report 2020. https:// www.advance-he.ac.uk/knowledge-hub/equality- higher-education-statistical-report-2020., 2020.

38. Jones AC, Nichols AC, McNicholas C, et al. Admissions Is Not Enough: The Racial Achievement Gap in Medical Education. *Academic Medicine* 2021;96(2):176 - 81.

39. Woolf K. Differential attainment in medical education and training. *Bmj-British Medical Journal* 2020;368.

40. Curtis S, Smith D. A comparison of undergraduate outcomes for students from gateway courses and standard entry medicine courses. *BMC Med Educ* 2020;20(1):4.

41. Boursicot K, Roberts T. Widening Participation in Medical Education: Challenging Elitism and Exclusion. *Higher Education Policy* 2009;22:19-36.

42. Angel C, Johnson A. Broadening access to undergraduate medical education. *British Medical Journal* 2000;321(7269):1136-38.

43. Department of Health. Medical schools: Delivering doctors of the future. London, 2004.

44. Fenwick A. Reflections on Widening Access to Medical Schools: The Case of Southampton. In: Hayton A P (ed.) *Access, Participation and Higher Education.* London: Kogan Page; 2002.

45. Milburn A. Fair Access to Professional Careers: a Progress Report by the Independent Reviewer on Social Mobility and Child Poverty, 2012.

46. Medical Schools Counci. Selection Alliance 2019 Report, 2019.

47. Alexander K, Cleland J. Social Inclusion or Social Engineering? The Politics and Reality of Widening Access to Medicine in the UK. In: Shah M, McKay J (eds.) *Achieving Equity and Quality in Higher Education: Global Perspectives in an Era of Widening Participation*. Basingstoke: Palgrave; 2018 p143-72.

48. General Medical Council. National training survey 2013: Socioeconomic status questions, 2013.

49. Department for Education. Schools, pupils and their characteristics: January 2016, 2016.

50. Smith-Woolley E, Pingault J-B, Selzam S, et al. Differences in exam performance between pupils attending selective and non-selective schools mirror the genetic differences between them. *Science of Learning* 2018;3.

51. Kumwenda B, Cleland JA, Walker K, et al. The relationship between school type and academic performance at medical school: a national, multi-cohort study. *Bmj Open* 2017;7(8):11.

52. Trust TS. Elitist Britain: The educational backgrounds of Britain's leading people: Social Mobility Commission, 2019.

53. Milburn A. Fair Access to Professional Careers: a Progress Report by the Independent Reviewer on Social Mobility and Child Poverty, 2012.

54. Higher Education Funding Council for England. Policy guide: Healthcare. http://www.hefce.ac.uk/lt/healthcare/ - d.en.113195.

55. Health Education England. Supported from the start; ready for the future; The Postgraduate Medical Foundation Programme Review, 2019.

56. Gore J, Patfield S, Holmes K, et al. Widening participation in medicine? New insights from school students' aspirations. *Medical Education* 2018;52(2):227-38.

57. Southgate E, Kelly BJ, Symonds IM. Disadvantage and the 'capacity to aspire' to medical school. *Medical Education* 2015;49(1):73-83.

58. Grafton-Clarke C, Biggs L, Garner J. Why students from under-represented backgrounds do not apply to medical school. *Widening Participation and Lifelong Learning* 2018;20:187-98.

59. Bassett AM, Brosnan C, Southgate E, et al. Transitional journeys into, and through medical education for First-in-Family (FiF) students: a qualitative interview study. *Bmc Medical Education* 2018;18:12.

60. Martin AJ, Beska BJ, Wood G, et al. Widening interest, widening participation: factors influencing school students' aspirations to study medicine. *Bmc Medical Education* 2018;18.

61. Mathers J, Parry J. Why are there so few working-class applicants to medical schools? Learning from the success stories. *Medical Education* 2009;43(3):219-28.

62. Southgate E, Brosnan C, Lempp H, et al. Travels in extreme social mobility: how first-in-family students find their way into and through medical education. *Critical Studies in Education* 2017;58(2):242-60.

63. Brosnan C, Southgate E, Outram S, et al. Experiences of medical students who are first in family to attend university. *Medical Education* 2016;50(8):842-51.

64. Greenhalgh T, Seyan K, Boynton P. "Not a university type": focus group study of social class, ethnic, and sex differences in school pupils' perceptions about medical school. *British Medical Journal* 2004;328(7455):1541-44A.

65. Shaikh FM, Babar M, Cross KS. Mini-Med School: promoting awareness of medicine as a career for suburban and rural high-school students. *Anz Journal of Surgery* 2013;83(6):481-86.

66. MacVicar R, Clarke G, Hogg DR. Scotland's GP Rural Fellowship: an initiative that has impacted on rural recruitment and retention. *Rural and Remote Health* 2016;16(1):8.

67. Whiting J, Wickham S, Beaney D. Medical student mentors in widening access to medicine programmes: 'we're lighting fires, not filling buckets'. *Widening Participation and Lifelong Learning* 2020;22.

68. Medical Schools Council Selection Alliance. Indicators of good practice in contextual admissions. https://www.medschools.ac.uk/media/2413/good-practice-in-contextual-admissions.pdf, 2018.

69. Greenhalgh T, Russell J, Dunkley L, et al. "We were treated like adults" - development of a pre-medicine summer school for 16 year olds from deprived socioeconomic backgrounds: action research study. *British Medical Journal* 2006;332(7544):762-66B.

70. Medical Schools Council Selection Alliance. Selection Alliance 2017 Report: An update on the Medical Schools Council's work in selection and widening participation. London, 2017.

71. Duenas AN, Tiffin PA, Finn GM. Understanding gateway to medicine programmes. *Clinical Teacher*:7.

72. Alexander K, Palma TF, Nicholson S, et al. 'Why not you?' Discourses of widening access on UK medical school websites. *Medical Education* 2017;51(6):598-611.

73. Cleland J, Cilliers F, van Schalkwyk S. The learning environment in remediation: a review. *Clinical Teacher* 2018;15(1):13-18.

74. Smit R. Towards a clearer understanding of student disadvantage in higher education: problematising deficit thinking. *Higher Education Research & Development* 2012;31(3):369-80.

75. Martin GL, Smith MJ, Williams BM. Reframing Deficit Thinking on Social Class. *Student Services* 2018:87-93.

76. Medical Schools Council. *Entry requirements for UK medical schools: 2022 entry* (accessed 11 August).

77. Apampa A, Kubacki A, Ojha U, et al. Challenges In Widening Participation Outreach: Is Enough Being Done To Tackle The Under-Representation Of Low-Income Students In Medicine? *Advances in Medical Education and Practice* 2019;10:917-23.

78. Kumwenda B, Cleland J, Prescott G, et al. Relationship between sociodemographic factors and specialty destination of UK trainee doctors: a national cohort study. *Bmj Open* 2019;9(3):12.

79. Garlick PB, Brown G. Widening participation in medicine. *Bmj-British Medical Journal* 2008;336(7653):1111-13.

80. Curtis S, Blundell C, Platz C, et al. Successfully widening access to medicine. Part 2: Curriculum design and student progression. *Journal of the Royal Society of Medicine* 2014;107(10):393-97.

81. Gibson Smith K, Alexander K, Cleland J. Opening up the black box of a Gateway to Medicine programme: a realist evaluation. *BMJ Open* 2021;11.

82. Mwandigha LM, Tiffin PA, Paton LW, et al. What is the effect of secondary (high) schooling on subsequent medical school performance? A national, UK-based, cohort study. *Bmj Open* 2018;8(5).

83. Puddey IB, Playford DE, Mercer A. Impact of medical student origins on the likelihood of ultimately practicing in areas of low vs high socio-economic status. *Bmc Medical Education* 2017;17.

84. Dowell J, Norbury M, Steven K, et al. Widening access to medicine may improve general practitioner recruitment in deprived and rural communities: survey of GP origins and current place of work. *Bmc Medical Education* 2015;15:7.

85. Saha S, Guiton G, Wimmers PF, et al. Student body racial and ethnic composition and diversity-related outcomes in US medical schools. *Jama-Journal of the American Medical Association* 2008;300(10):1135-45.

86. Saha S, Shipman S. The Rationale for Diversity in the Health Professions: A Review of the Evidence. *Health Resources and Services Administration*: US Department of Health and Human Services, 2006.

87. Saha S, Korthuis PT, Cohn JA, et al. Physician cultural competence, patient self-management, and clinical outcomes among persons living with HIV/AIDS. *Journal of General Internal Medicine* 2008;23:367-68.

88. Whitla DK, Orfield G, Silen W, et al. Educational benefits of diversity in medical school: A survey of students. *Academic Medicine* 2003;78(5):460-66.

89. Morrison E, Grbic D. Dimensions of Diversity and Perception of Having Learned From Individuals From Different Backgrounds: The Particular Importance of Racial Diversity. *Academic Medicine* 2015;90(7):937-45.

90. Cheek J. At the margins? Discourse analysis and qualitative research. *Qualitative Health Research* 2004;14(8):1140-50.

91. Willig C. *Introducing Qualitative Research in Psychology: Adventures in Theory and Method.* Buckingham: Open University Press; 2001.

92. Parker I. *Discourse dynamics: Critical analysis for social and individual psychology.* London: Routledge; 1992.

93. Van Dijk T. Aims of Critical Discourse Analysis *Japanese Discourse*; 1995 p17-27.

94. Bathmaker AM, Ingram N, Waller R. Higher education, social class and the mobilisation of capitals: recognising and playing the game. *British Journal of Sociology of Education* 2013;34(5-6):723-43.

95. Patterson R, Price J. Widening participation in medicine: what, why and how? *MedEdPublish* 2017;6(15).

96. Yosso TJ. Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity and Education* 2005;8(1):69-91.

97. Frost HD, Regehr G. "I AM a Doctor": Negotiating the Discourses of Standardization and Diversity in Professional Identity Construction. *Academic Medicine* 2013;88(10):1570-77.

98. O'Shea S. Avoiding the manufacture of 'sameness': first-in-family students, cultural capital and the higher education environment. *Higher Education* 2016;72(1):59-78.

99. !!! INVALID CITATION !!! 130-132.

100. Lowe C. GP recruitment crisis: the importance of widening participation. *British Journal of General Practice* 2019;69(687):519-20.

101. Zhang A. Do Individuals from Low-Income Families Belong in Medicine? (Yes!). *In-House*: https://in-housestaff.org/do-individuals-from-low-income-families-belong-in-medicine-yes-1903, 2021.

102. Macias LV. Choosing Success: A Paradigm for Empowering First–Generation College Students. *About Campus* 2013;18(5):17-21.

103. Marshall D, Case J. Rethinking 'disadvantage' in higher education: a paradigmatic case study using narrative analysis. *Studies in Higher Education* 2010;35(5):491-504.

104. Stephens NM, Fryberg SA, Markus HR, et al. Unseen Disadvantage: How American Universities' Focus on Independence Undermines the Academic Performance of First-Generation College Students. *Journal of Personality and Social Psychology* 2012;102(6):1178-97.

105. Adler PA, Kless SJ, Adler P. SOCIALIZATION TO GENDER-ROLES - POPULARITY AMONG ELEMENTARY-SCHOOL BOYS AND GIRLS. *Sociology of Education* 1992;65(3):169-87.

106. McNeill KG, Kerr A, Mavor KI. Identity and norms: the role of group membership in medical student wellbeing. *Perspect Med Educ* 2014;3:101-12.

107. Weaver R, Peters K, Koch J, et al. 'Part of the team': professional identity and social exclusivity in medical students. *Medical Education* 2011;45(12):1220-29.

108. Reilly D, Warren L, Kristandl G, et al. An investigation into the self-efficacy of year one undergraduate students at a widening participation university. *Teaching in Higher Education*.

109. McPherson M, Smith-Lovin L, Cook JM. Birds of a feather: Homophily in social networks. *Annual Review of Sociology* 2001;27:415-44.

110. Field J, Morgan-Klein N. The Importance of Social Support Structures for Retention and Success. In: HintonSmith T (ed.) *Widening Participation in Higher Education: Casting the Net Wide?* Basingstoke: Palgrave; 2012 p178-93.

111. Reay D, David ME, Ball S. *Degrees of choice – Social class, race and gender in higher education.* . Stoke on Trent: Trentham Books; 2005.

112. Torres K, Massey D. Fitting In: Segregation, Social Class, and the Experiences of Black Students at Selective Colleges and Universities. *Race and Social Problems* 2012;4:171-92.

113. Crozier G, Davies J. 'The trouble is they don't mix': self-segregation or enforced exclusion? *Race Ethnicity and Education* 2008;11(3):285-301.

114. Woolf K, Potts HWW, Patel S, et al. The hidden medical school: A longitudinal study of how social networks form, and how they relate to academic performance. *Medical Teacher* 2012;34(7):577-86.

115. Royal KD. Medical Students Rate Black Female Peers as Less Socially Connected. *Journal of the National Medical Association* 2018;110(2):157-62.

116. Denson N, Chang MJ. Racial Diversity Matters: The Impact of Diversity-Related Student Engagement and Institutional Context. *American Educational Research Journal* 2009;46(2):322-53.

117. Thiele T, Pope D, Singleton A, et al. Experience of disadvantage: The influence of identity on engagement in working class students' educational trajectories to an elite university. *British Educational Research Journal* 2017;43(1):49-67.

118. Bourdieu P, Patterson J. *Reproduction in education, society and culture*. London: Sage; 1977.

119. Jenkins R. PIERRE BOURDIEU AND THE REPRODUCTION OF DETERMINISM. *Sociology* 1982;16:270-81.

120. Nazar M, Kendall K, Day L, et al. Decolonising medical curricula through diversity education: Lessons from students. *Medical Teacher* 2015;37(4):385-93.

121. Rogers ME, Creed PA, Searle J, et al. Coping with medical training demands: thinking of dropping out, or in it for the long haul. *Studies in Higher Education* 2016;41(9):1715-32.

122. Saha S, Arbelaez J, Cooper L. Patient–physician relationships and racial disparities in the quality of health care. *American Journal of Public Health* 2003;93:1713-19.

123. Kelly-Blake K, Garrison NA, Fletcher FE, et al. Rationales for expanding minority physician representation in the workforce: a scoping review. *Medical Education* 2018;52(9):925-35.

124. Goddard M, Gravelle H, Hole A, et al. Where did all the GPs go? Increasing supply and geographical equity in England and Scotland. *Journal of Health Services Research & Policy* 2010;15(1):28-35.

125. Gorman D. Matching the production of doctors with national needs. *Medical Education* 2018;52(1):103-13.

126. Griffin B, Porfeli E, Hu WD. Who do you think you are? Medical student socioeconomic status and intention to work in underserved areas. *Advances in Health Sciences Education* 2017;22(2):491-504.

127. Office UFP. Career Destination Report 2016.

128. Rimmer A. Trainees from private schools are less likely to become GPs, researchers say. *BMJ* 2015;351.

129. Stoddard JJ, Back MR, Brotherton SE. The respective racial and ethnic diversity of US pediatricians and American children. *Pediatrics* 2000;105(1):27-31.

130. Mahon KE, Henderson MK, Kirch DG. Selecting Tomorrow's Physicians: The Key to the Future Health Care Workforce. *Academic Medicine* 2013;88(12):1806-11.

131. Cohen J, Gabriel BA, Terrell C. The case for diversity in the health care workforce. *Health Affairs (Milwood)* 2002;21:90-102.

132. Antonio AL, Chang MJ, Hakuta K, et al. Effects of racial diversity on complex thinking in college students. *Psychological Science* 2004;15(8):507-10.

133. Hong L, Page SE. Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences of the United States of America* 2004;101(46):16385-89.

134. Burrow GN. Medical student diversity - Elective or required? *Academic Medicine* 1998;73(10):1052-53.

135. Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports* 2003;118(4):293-302.

136. Verlinde E, De Laender N, De Maesschalck S, et al. The social gradient in doctor-patient communication. *International Journal for Equity in Health* 2012;11.

137. Ip H, McManus IC. Increasing diversity among clinicians. *British Medical Journal* 2008;336(7653):1082-83.

138. Lee M, Coulehan JL. Medical students' perceptions of racial diversity and gender equality. *Medical Education* 2006;40(7):691-96.

139. Terenzini PT, Pascarella ET, Blimling GS. Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development* 1996;37(2):149-62.

140. Braun V, Clarke V. *Successful qualitative research: a practical guide for beginners*. London: SAGE, 2013.

141. Savin-Baden M, Howell Major C. *Qualitative Research: The essential guide to theory and practice*. Oxon.: Routledge; 2013.

142. Webb C. THE USE OF THE 1ST-PERSON IN ACADEMIC WRITING - OBJECTIVITY, LANGUAGE AND GATEKEEPING. *Journal of Advanced Nursing* 1992;17(6):747-52.

143. Willig C. *Qualitative interpretation and analysis in psychology*. New York: Open University Press; 2012.

144. Denzin N, Lincoln Y. *The SAGE Handbook of Qualitative Research*. Thousand Oaks: SAGE Publications; 2017.

145. Anney V. Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies* 2014;5(2):272-81.

146. Krefting L. RIGOR IN QUALITATIVE RESEARCH - THE ASSESSMENT OF TRUSTWORTHINESS. *American Journal of Occupational Therapy* 1991;45(3):214-22.

147. Fryer T. *A short guide to ontology and epistemology: why everyone should be a critical realist*.

148. Gorski P. What is Critical Realism? And Why Should You Care? *Contemporary Sociology* 2013;42(5):658-70.

149. Varpio L, Ajjawi R, Monrouxe LV, et al. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical Education* 2017;51(1):40-50.

150. Thomas G. *How to do your case study*. London: SAGE Publications; 2016.

151. Guba E, Lincoln Y. Competing paradigms in qualitative research. In: Denzin N, Lincoln Y (eds.) *Handbook of qualitative research.* London: SAGE; 1994 p105-17.

152. Lumsden K. *Reflexivity: Theory, Method and Practice*: Routledge; 2019.

153. Ortlipp M. Keeping and using reflective journals in the qualitative research process. *The Qualitative Report* 2008;13(4):695-705.

154. Ragin C. Introduction: cases of 'What is a case?'. In: Ragin C, Becker H (eds.) *What is a Case? Exploring the Foundations of Social Enquiry*. Cambridge: Cambridge University Press; 1992.

155. Stake R. *The art of case study research.* Thousand Oaks, CA: SAGE Publications; 1995.

156. Simons H. *Case Study Research in Practice*. London: Sage; 2009.

157. Bates J, Ellaway RH. Mapping the dark matter of context: a conceptual scoping review. *Medical Education* 2016;50(8):807-16.

158. Yin R. *Case Study Research and Applications: Design and Methods.* 6th ed. London: SAGE Publications Ltd; 2018.

159. Merriam S. *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.; 1998.

160. Razack S, Maguire M, Hodges B, et al. What Might We Be Saying to Potential Applicants to Medical School? Discourses of Excellence, Equity, and Diversity on the Web Sites of Canada's 17 Medical Schools. *Academic Medicine* 2012;87(10):1323-29.

161. Wanigasooriya K, Beedham W, Laloo R, et al. The perceived impact of the Covid-19 pandemic on medical student education and training - an international survey. *Bmc Medical Education* 2021;21(1).

162. Rainbow S, Dorji T. Impact of COVID-19 on medical students in the United Kingdom. *Germs* 2020;10(3):240-43.

163. Komer L. COVID-19 amongst the pandemic of medical student mental health. *International Journal of Medical Students.* 2020;8(1):56-57.

164. University of Southampton. *Medicine: Undergraduate Study* (accessed August 12).

165. University of Southampton Medical Education. *BM6 Programme*. https://www.southampton.ac.uk/meded/curriculum_design_and_delivery/bm6.page.

166. Mozley H, D'Silva R, Curtis S. Enhancing self-efficacy through life skills workshops. *Widening Participation and Lifelong Learning* 2020;22:64-87.

167. Scottish Government. *Framework for fair access*.

168. University of Aberdeen School of Medicine, Medical Sciences and Nutrition. *Gateway2Medicine (G2M)*. https://www.abdn.ac.uk/smmsn/undergraduate/g2m/index.php.

169. Scottish Government. Widening access to medicine. https://www.gov.scot/news/widening-access-to-medicine-1/#:~:text=Pre%2Dmedical%20entry%20programme%20sees,entry%20programme%20started%20in%202017., 2018.

170. Office of National Statistics. *2011 Census data catalogue*.

171. Anane M, Curtis S. Is earning detrimental to learning? Experiences of medical students from traditional and low socioeconomic backgrounds. *The British Student Doctor* In prep.

172. Sheeran Y, Brown B, Baker S. Conflicting philosophies of inclusion: the contestation of knowledge in widening participation *London Review of Education* 2007;5(3):249-63.

173. Stevenson J, CLegg S, Lefever R. The discourse of widening participation and its critics: An institutional case study. *London Review of Education* 2010;8:105-15.

174. Archer L. Diversity, equality and higher education: a critical reflection on the ab/uses of equity discourse within widening participation. *Teaching in Higher Education* 2007;12(5-6):635-53.

175. Cleland JA, Nicholson S, Kelly N, et al. Taking context seriously: explaining widening access policy enactments in UK medical schools. *Medical Education* 2015;49(1):25-35.

176. Graham C. Discourses of widening participation in the prospectus documents and websites of six English higher education institutions. *British Journal of Sociology of Education* 2013;34(1):76-93.

177. Bowl M, Hughes J. Discourses of fair access in English higher education. *Widening Participation and Lifelong Learning* 2013;15:7-25.

178. Evans C, Rees G, Taylor C, et al. 'Widening Access' to higher education: the reproduction of university hierarchies through policy enactment. *Journal of Education Policy* 2019;34(1):101-16.

179. Munro L. 'Go boldly, dream large!': The challenges confronting non-traditional students at university. *Australian Journal of Education* 2011;55(2):115-31.

180. Alsop R, Gonzalez-Arnal S, Kilkey M. The widening participation agenda: the marginal place of care. *Gender and Education* 2008;20(6):623-37.

181. Razack S, Hodges B, Steinert Y, et al. Seeking inclusion in an exclusive process: discourses of medical school student selection. *Medical Education* 2015;49(1):36-47.

182. Nivet MA. A Diversity 3.0 Update: Are We Moving the Needle Enough? *Academic Medicine* 2015;90(12):1591-93.

183. The Student Room. The Conversion Report. Brighton, 2016:http://tsrmatters.com/new-student-insights-conversion-report-2016/.

184. Cleland J, Palma TF. "Aspirations of people who come from state education are different": how language reflects social exclusion in medical education. *Advances in Health Sciences Education* 2018;23(3):513-31.

185. Fairclough N. *Language and Power*. London: Longman; 2001.

186. Baxter A, Tate J, Hatt S. From Policy to Practice: Pupils' Responses to Widening Participation Initiatives. *Higher Education Quarterly* 2007;61(3):266-83.

187. Machin D, Mayr A. *How to do Critical Discourse Analysis*. London: SAGE; 2012.

188. Haggis T. Pedagogies for diversity: retaining critical challenge amidst fears of 'dumbing down'. *Studies in Higher Education* 2006;31(5):521-35.

189. Thomas L. Higher education widening participation policy in England: transforming higher education or reinforcing elitism? Ad-Lib, 2005:www.cont-ed.cam.ac.uk/BOCE/ adlib29/article1.html.

190. Shacklady J, Holmes E, Mason G, et al. Maturity and medical students' ease of transition into the clinical environment. *Medical Teacher* 2009;31(7):621-26.

191. Shore LM, Randel AE, Chung BG, et al. Inclusion and Diversity in Work Groups: A Review and Model for Future Research. *Journal of Management* 2011;37(4):1262-89.

192. Razack S, Philibert I. Inclusion in the clinical learning environment: Building the conditions for diverse human flourishing. *Medical Teacher* 2019;41(4):380-84.

193. Medical Schools Council. *Medical schools come together to support inclusion and diversity in undergraduate training*.

194. Cresswell J. *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks, CA: Sage; 1998.

195. Frith H. Focusing on sex: using focus groups in sex research. *Sexualities* 2000;3:275 - 97.

196. Wilkinson S. Focus groups: a feminist method. *Psychology of women quarterly* 1999;23:221-44.

197. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006;3:77-101.

198. Byrne D. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity* 2021.

199. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport Exercise and Health* 2019;11(4):589-97.

200. Lovell B. 'We are a tight community': social groups and social identity in medical undergraduates. *Medical Education* 2015;49(10):1016-27.

201. Roberts-MacDonald M, Razack S. Navigating social distance in foundational clinical encounters: Understanding medical students' early experiences with diverse patients. *Medical Teacher* 2018;40(9):934-43.

202. Thomas L. Building student engagement and belonging in higher education at a time of change. *What Works? Student Retention and Success Programme*, 2012.

203. Orom H, Semalulu T, Underwood W. The Social and Learning Environments Experienced by Underrepresented Minority Medical Students: A Narrative Review. *Academic Medicine* 2013;88(11):1765-77.

204. Cruess RL, Cruess SR, Boudreau JD, et al. A Schematic Representation of the Professional Identity Formation and Socialization of Medical Students and Residents: A Guide for Medical Educators. *Academic Medicine* 2015;90(6):718-25.

205. Thomas L. Student retention in higher education: the role of institutional habitus. *Journal of Education Policy* 2002;17(4):423-42.

206. Riessman CK. *Narrative Methods for the Human Sciences*. CA: Sage.

207. Mischler EG. *Research interviewing: Context and narrative*. Cambridge, MA: Harvard University Press; 1986.

208. Salmon P, Riessman C. Looking back on narrative research: An exchange. In: Andrews M, Squire C, Tamboukou M (eds.) *Doing Narrative Research*. 2nd ed: Sage; 2013.

209. Davies L, LeClair KL, Bagley P, et al. Face-to-Face Compared With Online Collected Accounts of Health and Illness Experiences: A Scoping Review. *Qualitative Health Research* 2020;30(13):2092-102.

210. Weller S. Using internet video calls in qualitative (longitudinal) interviews: some implications for rapport. *International Journal of Social Research Methodology* 2017;20(6):613-25.

211. Cater JK. Skype a cost-effective method for qualitative research. *Rehabilitation Counselors & Educators Journal* 2011;4:10-17.

212. Wengraf T. *BNIM Short Guide bound with the BNIM Detailed Manual. Interviewing for life-histories, lived periods and situations, and ongoing personal experiencing using the Biographic-Narrative Interpretive Method (BNIM)* NCRM; 2013.

213. Polkinghorne D. Narrative configuration in qualitative analysis. *Qualitative Studies in Education* 1995;8:5-23.

214. Erben M. *Biography and Education*. London: Falmer Press; 1998.

215. McCormack C. From Interview Transcript to Interpretive Story: Part 1—Viewing the Transcript through Multiple Lenses. *Field Methods.* 2000;12(4):282-97.

216. McCormack C. From Interview Transcript to Interpretive Story: Part 2— Developing an Interpretive Story. *Field Methods* 2000;12:298-315.

217. McCormack C. *The times of our lives: women, leisure and postgraduate research*. University of Wollongong, 2001.

218. Brannen J, Nilsen A. Individualisation, choice and structure: a discussion of current trends in sociological analysis. *Sociological Review* 2005;53(3):412-28.

219. Riessman CA. *Narrative Analysis*. Newbury Park, CA: Sage; 1993.

220. Denzin NK. The art and politics of interpretation. In: Denzin NK, Lincoln YS (eds.) *Handbook of qualitative research*. Thousand Oaks, CA: Sage; 1994 p500-15.

221. Robertson J, Le Sueur H, Terblanche N. Reflective practice during action learning in management development programmes. *European Journal of Training and Development* 2021;45(2-3):149-65.

222. Foxall F, Sundin D, Towell-Barnard A, et al. Revealing Meaning From Story: The Application of Narrative Inquiry to Explore the Factors That Influence Decision Making in Relation to the Withdrawal of Life-Sustaining Treatment in The Intensive Care Unit. *International Journal of Qualitative Methods* 2021;20.

223. Dibley L. Analysing narrative data using McCormack's Lenses. *Nurse Researcher* 2011;18(3):13-19.

224. Kmietowicz Z. Are medical schools turning a blind eye to racism? *BMJ* 2020.

225. Equality and Human Rights Commission. Tackling racial harassment: universities challenged. https://www.equalityhumanrights.com/en/publication-download/tackling-racial-harassment-universities-challenged, 2019.

226. Coupland N. 'Other' representation. In: Jaspers J, Ostman J, Verschueren J (eds.) *Handbook of Pragmatics Highlights: Society and Language Use*. Amsterdam: John Benjamins.; 2010 p241–60.

227. England and Wales 2011 Census. Regional ethnic diversity. https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/regional-ethnic-diversity/latest#areas-of-england-and-wales-by-ethnicity: Office for National Statistics, 2020.

228. Orvell A, Kross E, Gelman SA. PSYCHOLOGY How "you" makes meaning. *Science* 2017;355(6331):1299-301.

229. Universities UK. Universities UK calls for urgent action on racial harassment in higher education. https://www.universitiesuk.ac.uk/what-we-do/creating-voice-our-members/media-releases/universities-uk-calls-urgent-action, 2021.

230. LaDonna K, Field E, Cowley L, et al. Rejecting the imposter label: Exploring the link between workplace discrimination and women trainees' and faculty physicians' perceptions of their competence *AMEE, Lyon.* https://amee.org/conferences/amee-2022; 2022.

231. Social Mobility Commission. An Unequal Playing Field: Extra-Curricular Activities, Soft Skills and Social Mobility. https://www.gov.uk/government/publications/extra-curricular-activities-soft-skills-and-social-mobility, 2019.

232. Torres JM. *A Sense of (Non)Belonging: How School Factors Affect the Participation of Latino Students in Extracurricular Activities at a Predominately White Suburban High School*. University of Pennsylvania, 2018.

233. Mathers J, Parry J. Older mature students' experiences of applying to study medicine in England: an interview study. *Medical Education* 2010;44(11):1084-94.

234. McPherson M, Smith-Lovin L, Cook J. Birds of a feather: Homophily in social networks. . *Ann Rev Sociol* 2001;27:415-44.

235. Sempik J, Becker S. Young Adult Carers at School: Experiences and Perceptions of Caring and Education. London: Carers Trust, 2013.

236. Kettell L. Young adult carers in higher education: the motivations, barriers and challenges involved - a UK study. *Journal of Further and Higher Education* 2020;44(1):100-12.

237. Clance PR, Imes SA. The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice,* 1978;15:241 - 47.

238. University of Aberdeen. *Gateway2Medicine (G2M)*. https://www.abdn.ac.uk/smmsn/undergraduate/g2m/index.php.

239. Alexander K, Cleland J, Nicholson S. Bridging the cultural divide? Exploring school pupils' perceptions of medicine. *Medical Education* 2019;53(6):571-83.

240. Ashley L, Duberley J, Sommerlad H, et al. A qualitative evaluation of noneducational barriers to the elite professions. London: Social Mobility and Child Poverty Commission, 2015.

241. Chandra S, Huebert CA, Crowley E, et al. Impostor Syndrome Could It Be Holding You or Your Mentees Back? *Chest* 2019;156(1):26-32.

242. Villwock J, Sobin LB, Koester LA, et al. Impostor syndrome and burnout among American medical students: a pilot study. *International Journal of Medical Education* 2016;7:364-69.

243. Gottlieb M, Chung A, Battaglioli N, et al. Impostor syndrome among physicians and physicians in training: A scoping review. *Medical Education* 2020;54(2):116-24.

244. Tulshyan R, Burey J-A. Stop Telling Women They Have Imposter Syndrome. *Harvard Business Review*. https://hbr.org/2021/02/stop-telling-women-they-have-imposter-syndrome#:~:text=Imposter%20syndrome%20is%20loosely%20defined,they're%20deserving%20of%20accolades.: shorturl.at/qxR16, 2021.

245. Foreshew A, Al-Jawad M. An intersectional participatory action research approach to explore and address class elitism in medical education. *Medical Education*.

246. Bentley L. Habitus war: Being a Working-class Woman in Academia. In: Burnell I (ed.) *The Lives of Working Class Academics: getting ideas above your station*: Emerald; 2022.

247. Reay D. Beyond consciousness? The psychic landscape of social class. *Sociology-the Journal of the British Sociological Association* 2005;39(5):911-28.

248. Fraser N. Social justice in the age of identity politics: Redistribution, recognition, participation. *WZB Discussion Paper* 1998:98-108.

249. Johnson SM, Kurtz ME, Tomlinson T, et al. STUDENTS STEREOTYPES OF PATIENTS AS BARRIERS TO CLINICAL DECISION-MAKING. *Journal of Medical Education* 1986;61(9):727-35.

250. van Ryn M, Burke J. The effect of patient race and socio-economic status on physicians' perceptions of patients. *Social Science & Medicine* 2000;50(6):813-28.

251. Scambler G. Sociology, Social Class, Health Inequalities, and the Avoidance of "Classism". *Frontiers in Sociology* 2019;4.

252. Sayer A. *The Moral Significance of Class*. Cambridge: Cambridge University Press; 2005.

253. Verdonk P. When I say ... reflexivity. *Medical Education* 2015;49(2):147-48.

254. Aldridge J, Becker S. *Children who care: Inside the world of young carers*. Loughborough, UK: Loughborough University; 1993.

255. Reay D. Social mobility, a panacea for austere times: tales of emperors, frogs, and tadpoles. *British Journal of Sociology of Education* 2013;34(5-6):660-77.

256. Mezirow J. Transformative Dimensions of Adult Learning. San Francisco, CA: Jossey-Bass; 1995.

257. Biggs L, Grafton-Clarke C, Garner J. Perception of medicine in under-represented students. *Education for Primary Care* 2019;30(1):49-51.

258. Henning K, Ey S, Shaw D. Perfectionism, the impostor phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students. *Medical Education* 1998;32(5):456-64.

259. Curtis S, D'Silva R, Mozley H, et al. Alternative Journeys to Success. https://www.youtube.com/watch?v=q16tUjq50oE&feature=youtu.be&ab_channel=UniversityofSouthamptonMedicine, 2020.

260. Nivet MA, Castillo-Page L, Conrad SS. A Diversity and Inclusion Framework for Medical Education. *Academic Medicine* 2016;91(7):1031-31.

261. Muntinga ME, Krajenbrink VQE, Peerdeman SM, et al. Toward diversity-responsive medical education: taking an intersectionality-based approach to a curriculum evaluation. *Advances in Health Sciences Education* 2016;21(3):541-59.

262. Verdonk P, Abma T. Intersectionality and reflexivity in medical education research. *Medical Education* 2013;47(8):754-56.

263. Cleland J, Patterson F, Hanson M. Thinking of selection and widening access as complex and wicked problems. *Medical Education* 2018;52:1228–39.

264. McKay J, Devlin M. 'Uni has a different language ... to the real world': demystifying academic culture and discourse for students from low socioeconomic backgrounds. *Higher Education Research & Development* 2014;33(5):949-61.

265. Razack S. 'Fairness' and student selection: the case for mandatory air quotes. *Medical Education* 2016;50(6):600-02.

Appendix A Positionality statement

My background and upbringing made me a fairly 'traditional' university student: I am a White, middle-class, heterosexual, non-disabled female who grew up in the North Yorkshire countryside, where many other students fell into the same demographic categories (or appeared to). Although neither of my parents studied at university, they both value education and encouraged and supported me during my schooling and the university application processes. I attended the local state school, where I achieved good GCSE and A-Level grades. It was assumed by my family, my school and my friends that I would go to university.

Consequently, I can relate in some ways to many of my participants, who also hail from more 'traditional' university student backgrounds and were academic high-achievers in school. I have rarely experienced the feeling of being a 'minority' and 'fit in' to many UK educational environments with relative ease compared to others. Although I have never studied medicine, these aspects of my backgrounds may position me as similar to many medical students, potentially providing me with greater understanding of their perspectives and experiences. However, these same qualities also present risks of bias, selectivity and making assumptions based on my own experiences. They could also limit my understanding of perspectives of others from different backgrounds and experiences. However, I believe that I can exercise critical engagement with my findings by being aware of this possibility; and I can further minimise these risks by 'member checking' my interpretations with colleagues, and engaging in critical discussion with other researchers to ensure that my designs and findings are evidenced-based.

Reflecting on my experiences has illuminated my pathway to studying the impact of increasing diversity through WP, and my attraction to a research study which has the potential to challenge common perceptions of WP. My university experience sharply contrasted my home life. I studied Psychology at the University of Leicester, and moved to the city. Many of my university friends hailed from similar, often wealthier backgrounds than myself. My student loan covered my rent and basic bills, but I was one of the few students I knew that needed to work part-time to cover food and socialising; it made me feel different and, at times, less worthy. I soon learned, however, that some of my work colleagues struggled to get by, and were often supporting their families and partners, not just themselves, which helped me to re-frame my perspective. Compared to my rural Yorkshire village, Leicester city and the university were highly diverse. It was exciting to integrate with new people who had such different backgrounds and life experiences, and to learn about different cultures. I realised that I had very much lived inside a homogenous Yorkshire bubble that, whilst very comfortable and familiar, could be limiting and restrictive. My perspectives and worldview became transformed through these exposures to difference,

After graduating, I began working in a poorly-performing secondary state school as an English tutor for students eligible for Pupil Premium. The tutor role was needed because Pupil Premium students' academic awards were significantly worse than their peers at all stages of their education, but most notably in their GCSEs. I felt devastated by the injustice of this; and yet, for many of the students with whom I worked, this was just 'the norm' and many had low expectations for their futures. Observing such different attitudes towards education and its importance sparked my interest in critical

pedagogy and research. I began studying a part-time Masters in Childhood and Youth Studies, which gave me a strong theoretical grasp of inequality in education. We were actively encouraged to problematise typical constructions of inequality and I identified strongly with Kinchenloe and McLaren's aims of 'irritating' sources of power by challenging dominant beliefs and exploring alternative ways of viewing the world255.

As I developed my identity as a critical researcher, I questioned my own motivation for working with and researching the Pupil Premium. Although it felt inherently 'right' to play a role in tackling what I viewed as a great social injustice, this was based on my values regarding the importance of 'education' in society. My beliefs had been shaped by my own experiences in an education system that was largely designed and implemented by people 'like me'. I questioned whether my views on education were 'true', or simply a product of my culture; was it 'right' to engage in 'social engineering' by 'boosting' the education of those from different backgrounds, with different sets of cultures, values and beliefs? Moreover, does providing support to individuals to help them succeed within this system simply perpetuate the issue; should the system, rather than the individual, be targeted?

My studies illustrated how easy it is for an 'outsider' to make fallible assumptions about what is problematic, and what the solution should be256. On the other hand, was it right to be aware of the inequality of outcomes, and not take action (or at least try to understand it better), when systematic change takes so long? This is a tension I continue to negotiate; I remain sensitive to the potential of my role, and the language used in research communities and by WP practitioners, to marginalise or diminish other ways of thinking about education and its value in society. I believe that Widening Participation should really be grounded in efforts to fix our broken education system: diversity should not have to be accommodated within historic and outdated notions of merit. Enormous social and cultural transformations of the HE system are required, which cannot happen overnight. In the meantime, there are many students who have great academic potential and valuable contributions to make to universities and professions, who do not have equal opportunities to do so within our existing models, and we must continue to offer them support.

I have also worked for another university as a WP Officer, promoting a number of allied healthcare and other science-based programmes, and supporting students from WP backgrounds to make university applications. I greatly enjoyed the work. This, of course, reveals my personal attachment to WP. In addition, one of my main supervisor's main professional roles is to support, champion and advocate for SURGs. I understand that this creates the potential for bias and a personal desire to select and promote the positives of WP student inclusion when researching the topic. Being transparent about these factors, and maintaining a heightened awareness of these potential biases and tensions through regular reflexive practice are essential for me to produce rigorous and critical research. It also highlights the importance of opening up my findings to interpretations and challenges of other perspectives. I consider my primary aim to enhance understanding about the inclusion of SURGs in these medical schools, not simply to prove my personal beliefs.

Through my reflexive practice, I have also come to realise that in my practice as a WP Officer, my colleagues and I often (inadvertently) drew on a deficit discourse of SURGs in our promotional materials. Although we regularly discussed the benefits of increasing diversity in our student populations, we felt that these benefits were a 'given', or that to

promote them would be somehow insensitive or alienate more traditional students. Perhaps, as other researchers have suggested, we felt that a meritocratic, rights-based discourse was more aligned to the institutional aims of promoting a culture of academic excellence than a diversity-positive discourse might imply154,170. Although it was not my initial intention, I realise that I have developed a heightened awareness for this discourse in my research. While I will take steps to minimise the potential for this interest to unduly influence my data generation and analysis, I hope that I can use it as motivation to disseminate findings to a wide audience, including practitioners, to raise awareness of the potential impact of being in a position of power and privilege when working in this field.

Appendix B Reflexive journal excerpt – methodology

20/03/19

During focus groups today, I realised that my question framework was so broad that it may not have elicited responses that will help me prepare for the next stage of research.

I planned the order of the FG questions with the aim of creating a coherent, flowing narrative:

- Who is WP for?
- Tell me about the programmes we have at Southampton and who they are for?
- Now tell me about the impact of having diversity in the cohort

Participants generally understand that **WP and the BM6 course are for students from low SES backgrounds** – only one group has mentioned ethnicity at this point – and all acknowledged that WP/BM6 aimed to increase diversity in medicine. But the connection was not made for the final question – when talking about diversity, almost all groups have predominantly focused on the **impact of ethnic/cultural diversity on medical student education**!

Obviously, I am delighted that students feel like they're learning from each others' diverse experiences relating to ethnicity and culture, and of course, intersectionality plays a role in WP. But, my next stage of research is supposed to focus predominantly on the impact of BM6, through which the medical school seeks to increase low SES students. Is it possible to disentangle these factors? Perhaps not, at the UoS.

I don't want to lead too much with my questioning, but if I don't find a way to bring in SES then it might be difficult to address my actual research question. I am not sure whether my role as FG facilitator was a bit too neutral – should I have interjected here to ask about SES? I was keen for responses to be authentic but this could be a detriment in that I'm missing out on capturing potentially useful data. Going forward, do I treat all groups the same, or do I use this realisation to change my approach to FG facilitation and interject more, with the risk of disrupting a potentially interesting conversation? What impact will that have on the data?

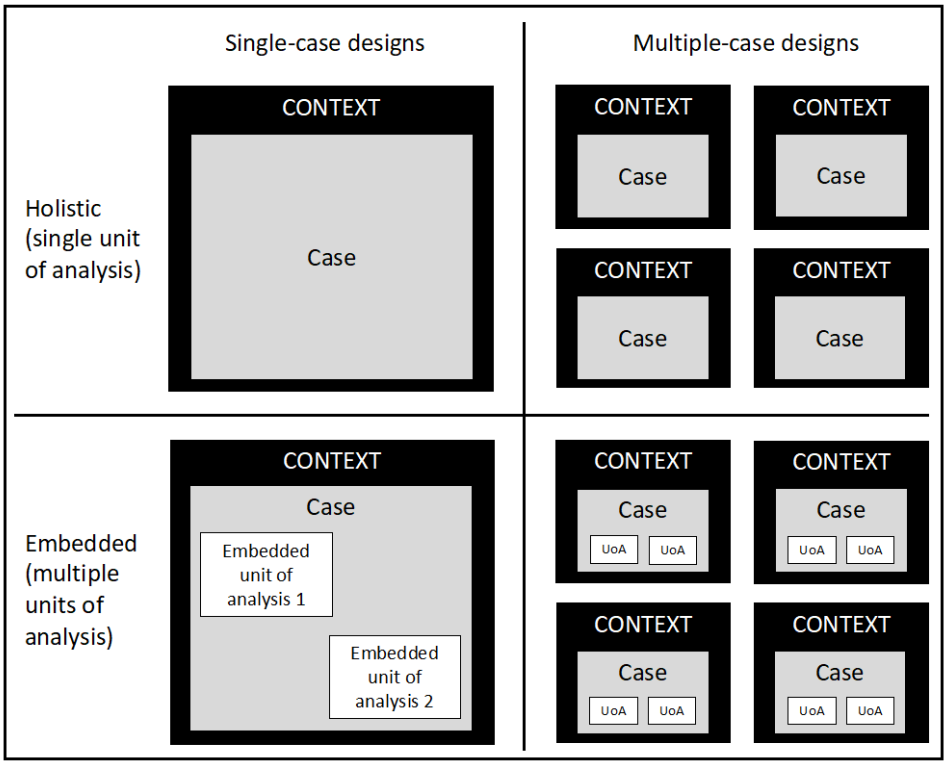
My idea of low SES may also be totally different from the participants – my background will influence this – both my personal upbringing and my experience teaching Pupil Premium and Free School Meals students in a secondary school. Definitions of SES are at best contentious anyway. It will be important to try and communicate in a neutral way – could I start by talking to participants about their understanding of SES? Need to work on this as part of methodology development for next stage and discuss with supervisors.

What if students aren't really aware of the SES of their peers? It's not particularly visible compared to ethnicity. At the UoS, we use family income and NS-SEC as a measure of SES, but how can that 'difference' be seen, compared to ethnicity, or accent, for example? If students aren't aware of SES, then how do we ascertain if there

is an impact, or what the impact is (if it's unconscious)? Potentially a bit of a rabbit hole (warren) here.

Another issue is that students from low SES backgrounds may be unwilling to share their experiences of their background due to stigma/marginalisation etc, or perhaps microaggressions are not easily recognised or thought as significant enough to report. I remember my own experiences of my uni housemates talking about their skiing holidays and shopping in America and remembering my holidays in caravan or camping at Whitby and feeling like I couldn't join in! All the research indicates that there is still an elitism in medicine, which could be preventing any potential impact of SES being realised. Students may be trying to come across as 'traditional' and belonging/fitting-in and thus masking parts of themselves that might reveal their low-SES background or current status. For example, I ran up nearly two thousand pounds of credit card debt trying to keep up with the social lives of my university friends – and I don't consider myself to be particularly financially disadvantaged! This might link to Frost and Regher's ideas about competing values of standardisation vs. diversity discourses – not just that the tension exists, as they suggest, but what is the *impact* of this tension on non-traditional students on the course?

Appendix C Visual model of basic case study designs by Yin (2018, p48)



Appendix D Reflection on changes to supervision (Jen leaving)

During my candidature, my secondary supervisor and lead contact at the University of Aberdeen, Jen Cleland, moved to take on a new role at a School of Medicine in Singapore. This had a significant impact on my experience of undertaking a qualitative, multiple-case study research project.

Firstly, Jen had been the only member of my team with an extensive background in qualitative research. While the other three members of my team have supported qualitative studies and done some data collection and analysis, they had primarily worked with quantitative data in their own research, and did not have experience in guiding qualitative research to a PhD standard. They were therefore less able to probe, challenge or question some of the methodological choices that I made. This became very apparent in my progression reviews: my examiners had much more expertise in qualitative methodologies, and their guidance and feedback from those sessions were invaluable in helping me to move forward.

Secondly, I was conscious that being English and geographically located close to one institution (Southampton) would inevitably shape my research and potentially create bias in the outcomes. At the outset of my PhD, my supervisors and I had envisioned that I would visit the Aberdeen medical school more regularly, to engage in those helpful and impromptu conversations that help to understand the context there. I had hoped and expected to become an active member of the medical education communities in both contexts. This was made impossible due to the restrictions of Covid-19.

Jen's departure also meant that I had greatly reduced my access to staff at the University of Aberdeen who could support me with understanding the local context, organising the necessary ethics, making introductions to staff who might assist in gatekeeping or recruitment. One of Jen's former students, who had supported me during the focus group data collection, had initially been happy to continue to liaise with me during my candidature, but left on maternity leave.

Both of these issues were greatly exacerbated by the pandemic. As Covid-19 also immensely increased the workloads of university staff, it was very difficult to find suitable members of staff at either institution with the capacity to *volunteer* to help me with my qualitative methodologies or support me with undertaking research with participants in Aberdeen. It took a long time to find a suitable member of staff who was willing to take on the responsibility of being a local PI and gain ethical approval at Aberdeen medical school. Consequently, recruitment and interviews were greatly delayed, and I did not manage to hold online narrative interviews with any students from the University of Aberdeen until December 2021. My last narrative interview was held on the last working day before my PhD studentship ended, after which I transferred to nominal registration. Consequently, the transcribing, analysis, interpretation and write up of my narrative data was undertaken with less support from my remaining supervisory team (due to being in nominal registration), and while working exclusively remotely due to Covid-19.

There was significant potential for this to affect my research process, and limit my understanding of the data I generated. While this research has been incredibly difficult, and at times very isolating, I was lucky to be able to draw on a number of sources to support me:

- My main supervisor (Sally) set up regular meetings for Qualitative Researchers in Medical Education, where I was able to discuss my findings with staff and students from a range of backgrounds (including BM6 students, BM5 students, Master's students and other PhD students) working on similar topics. They could therefore understand my work, and also provide a range of varied but relevant, insider perspectives on my interpretations. I was fortunate that this team were skilled in challenging, questioning and probing my interpretations, and I know that the output of this thesis has been enriched through their engagement.
- For the focus group study, the G2M gateway lead and deputy lead generously devoted time and energy to reviewing and approving my analysis and write up. They provided additional details about the local context and G2M programme, and agreed that it was a fair and credible reflection that aligned with their experiences
- The narrative interviews were slightly more complicated, as the amount of data and the analysis are – well – they are literally all short novels. Although I knew that this chapter of my research would be reviewed by members of the University of Southampton (all three of my remaining supervisors), I felt extremely uncomfortable asking for member of the University of Aberdeen to do the same. I therefore liaised more closely with participants, asking them to review their own transcripts, my summaries and my initial interpretations to increase the credibility of this study. I have discussed this in the methods section of Chapter 8.
- I attended both external and internal training on Narrative interviewing and analysis; my main supervisor (Sally) also attended the excellent external training so that we both felt confident that she could provide support
- A senior Research Fellow at the University of Southampton with experience in undertaking Narrative inquiry very kindly reviewed and discussed with me an early version of two interpretive stories, suggested some relevant psychological theories to enhance my understanding of my data, and provided guidance on how to strengthen my general analytical processes.

Appendix E Demographic categories table for UKMED

Demographic category	Definition
IMD (The Index of Multiple Deprivation)	Ranks small areas of England based on 7 domains of deprivation, including income, employment and health. Areas are ranked into Quintiles (Q's) 1-5, with Q1 representing the most deprived areas, and Q5 representing the least deprived
Parental Education:	Whether students' parents attended university
POLAR data:	Measures Higher Education participation rates based on postcode data. postcodes are organised into Quintiles (Q's) 1-5, with Q1 representing the areas with lowest rates of university participation, and Q5 representing the highest rates of participation
School type:	Divides students into whether they attended a privately funded or state funded school, but does not discern between selective and non-selective schools
SEC (or NS-SEC – see below)	Socio-economic Classification, which is based on parents' occupation as reported by students (or the students' occupation prior to enrolling at university if they are mature). This dataset has divided occupations into 5 categories (plus 'not recorded') ranging from 'high status' managerial and professional occupations to semi-routine and routine occupations

Table showing the Office for National Statistics measure for ‘classing’ parental occupation, which contributes to definitions of socio-economic status.

NS-SEC class	Description
1	Higher managerial, administrative and professional occupations
	1.1 Large employers and higher managerial and administrative occupations
	1.2 Higher professional occupations
2	Lower managerial, administrative and professional occupations
3	Intermediate occupations
4	Small employers and own account workers
5	Lower supervisory and technical occupations
6	Semi-routine occupations
7	Routine occupations
8	Never worked and long-term unemployed

Appendix F Reflections on the impact of Covid-19 and health on my PhD journey

I have reflected on a few of the practical implications of the Covid-19 pandemic and the UK national lockdown on my participants and on the research process within the main thesis. In this appendix, I briefly discuss some of the implications of undertaking independent research during this unstable period, including some personal effects which affected my doctoral experience.

Like everyone else, the global impact of the Covid-19 had a significant impact on my personal and professional life, as well as the lives of those in my support network. The national lockdown was imposed around a year into my three-year candidature, and continued to limit my PhD experiences across the remaining two years (and the period of nominal registration). Fortunately, as I was commuting between Oxford, where I live, and Southampton anyway, I had previously only been working on the university campus two or three days per week, and was thus better prepared than most to shift to distance-working, in a comfortable and well-equipped home office.

Nonetheless, I was irrefutably affected by being away from the campus. I greatly miss(ed) the loss of social networking, those impromptu meetings around the kettle where tiny thoughts, niggles, anxieties could be raised and discussed with acquaintances and colleagues. I am sure that if I had undertaken this work in 'normal times', my research process, interviews, interpretations and conclusions would have been very different.

With all meetings being moved to online, I quickly experienced screen fatigue, and as many others have experienced, the boundaries between personal and professional life became blurred, or at time, non-existent. This caused a lot of pressure and guilt. On a practical note, I had fewer opportunities to enjoy the more exciting elements of undertaking a PhD project, such as attending and presenting at international conferences, and the potential for networking and collaboration with others that these situations confer. Although many conferences were held online, their impact, I believe, was greatly muted compared to their in-person equivalents.

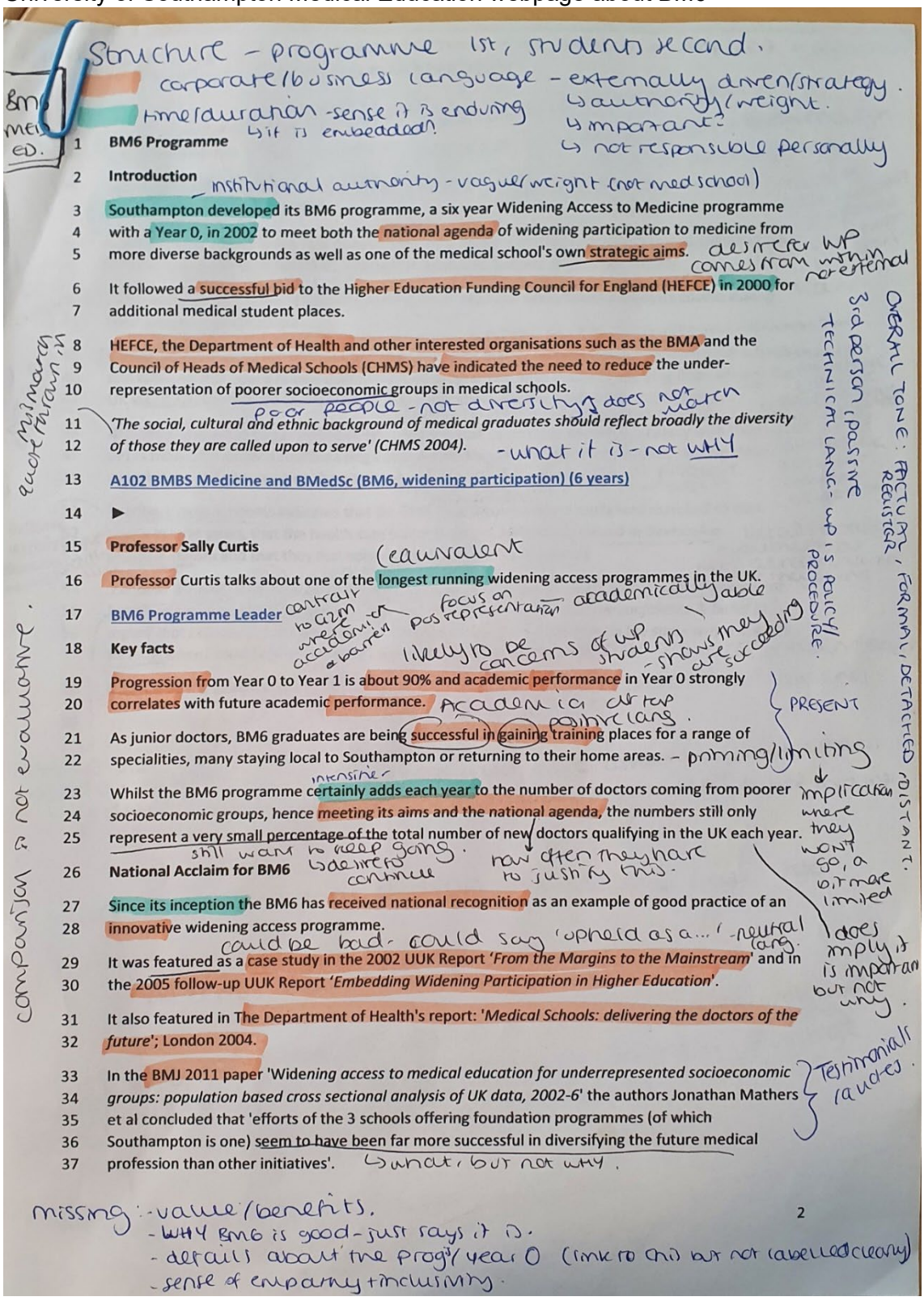
As well as working on my PhD, I have also worked part-time in various capacities, including as a research assistant on relevant projects at the UoS, and as a Tutor for the Brilliant Club, teaching a self-developed module relating to my PhD (education inequality) to small groups of secondary-aged students who are underrepresented in UK universities. Moving to online teaching increased this extra workload, and the unpredictable shifting between working in-schools and online was confusing and discombobulating at times. Returning to work in classrooms inevitably caused some anxiety around contracting Covid-19, and made me reluctant to visit vulnerable family and friends for fear of being a 'carrier'. As life began to return to normal, I entered nominal registration, and began working at a local University 4-days per week, leaving me one 'official' day per week to work on my PhD, alongside evenings and weekends.

During this unique time of global stress and isolation, I was also diagnosed with a physical health condition which does not physically affect my day-to-day experiences, but took a significant, additional toll on my mental wellbeing.

Nonetheless, I have been incredibly lucky compared to many others during this time. While Covid-19 has influenced my PhD, I have benefited from the professional stability and security of a fully-funded, three-year studentship, and I have developed an incredible support network. I have become more resilient, independent and more self-sufficient, and significantly better at sustaining valuable, long-distance friendships. I have come to value those tiny ‘normal life’ meetings, hugs and celebrations in a way that I could not have imagined before. Looking ahead, I am excited to take advantage of the opportunities I missed during the pandemic.

Appendix G Examples of original webpage text data and initial coding

University of Southampton Medical Education webpage about BM6



1 **BM6 Programme**

2 **Introduction**

3 Southampton developed its BM6 programme, a six year Widening Access to Medicine programme
4 with a Year 0, in 2002 to meet both the national agenda of widening participation to medicine from
5 more diverse backgrounds as well as one of the medical school's own strategic aims.

6 It followed a successful bid to the Higher Education Funding Council for England (HEFCE) in 2000 for
7 additional medical student places.

8 HEFCE, the Department of Health and other interested organisations such as the BMA and the
9 Council of Heads of Medical Schools (CHMS) have indicated the need to reduce the under-
10 representation of poorer socioeconomic groups in medical schools.

11 *'The social, cultural and ethnic background of medical graduates should reflect broadly the diversity*
12 *of those they are called upon to serve' (CHMS 2004).*

13 A102 BMBS Medicine and BMedSc (BM6, widening participation) (6 years)

14 ▶

15 **Professor Sally Curtis**

16 Professor Curtis talks about one of the longest running widening access programmes in the UK.

17 BM6 Programme Leader

18 **Key facts**

19 Progression from Year 0 to Year 1 is about 90% and academic performance in Year 0 strongly
20 correlates with future academic performance.

21 As junior doctors, BM6 graduates are being successful in gaining training places for a range of
22 specialities, many staying local to Southampton or returning to their home areas.

23 Whilst the BM6 programme certainly adds each year to the number of doctors coming from poorer
24 socioeconomic groups, hence meeting its aims and the national agenda, the numbers still only
25 represent a very small percentage of the total number of new doctors qualifying in the UK each year.

26 **National Acclaim for BM6**

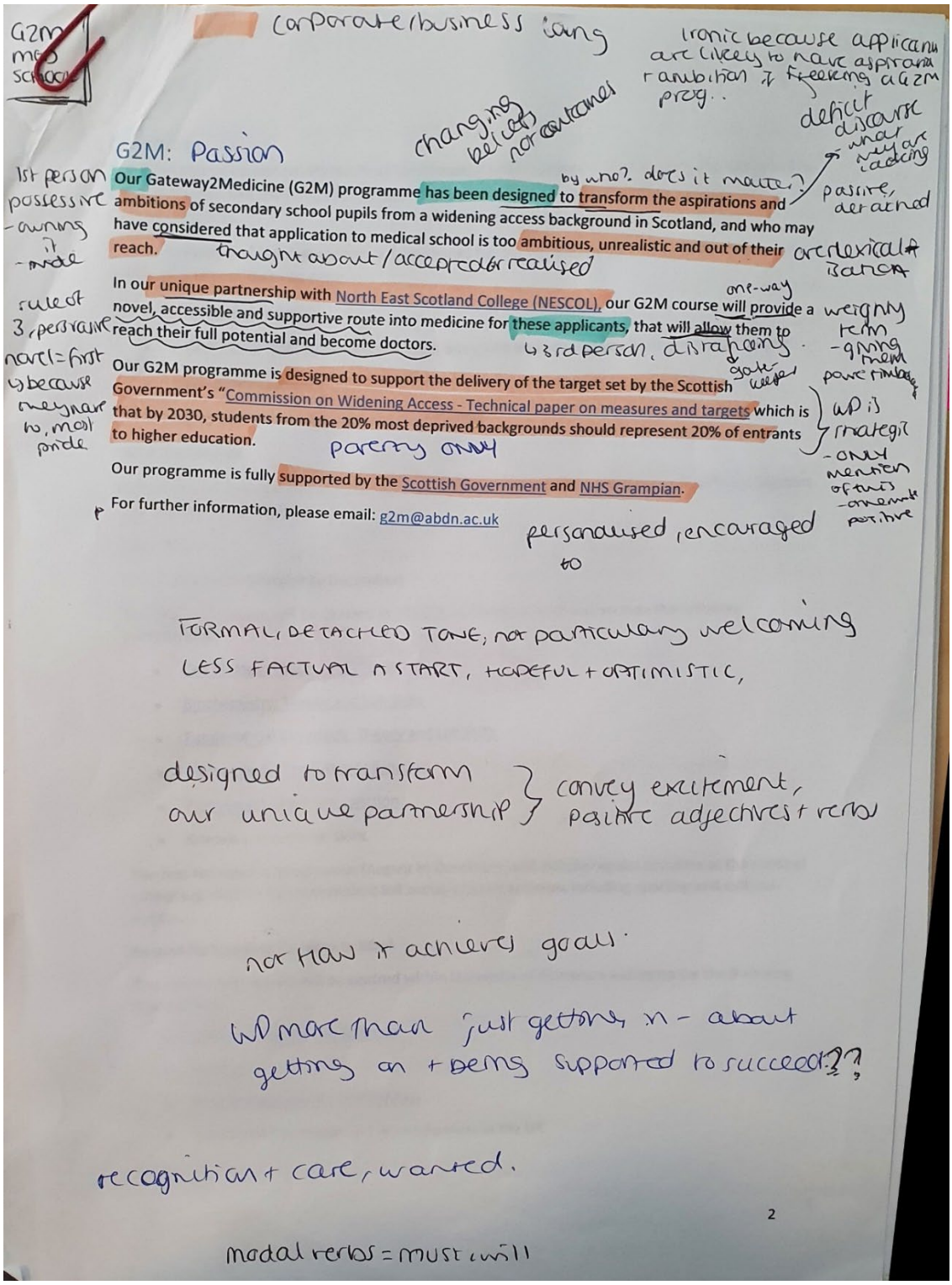
27 Since its inception the BM6 has received national recognition as an example of good practice of an
28 innovative widening access programme.

29 It was featured as a case study in the 2002 UUK Report '*From the Margins to the Mainstream*' and in
30 the 2005 follow-up UUK Report '*Embedding Widening Participation in Higher Education*'.

31 It also featured in The Department of Health's report: '*Medical Schools: delivering the doctors of the*
32 *future*'; London 2004.

33 In the BMJ 2011 paper 'Wid*ening access to medical education for underrepresented socioeconomic*
34 *groups: population based cross sectional analysis of UK data, 2002-6*' the authors Jonathan Mathers
35 et al concluded that 'efforts of the 3 schools offering foundation programmes (of which
36 Southampton is one) seem to have been far more successful in diversifying the future medical
37 profession than other initiatives'.

University of Aberdeen Medical School webpage about G2M



Appendix H Documents relating to ethical approval for the focus group study: approval letters, Participant Information Sheet, Consent Form, interview framework

H.1 Southampton Ethical Approval letter

UNIVERSITY OF Southampton

10th March 2019

Dear Heather,

ERGO 47542

Exploring perceptions of widening participation and student diversity in a UK medical school

Thank you for submitting your revison relating to the above study. I am pleased to inform you that full approval has now been granted by the Faculty of Medicine Ethics Committee.

Approval is valid from today until 06/01/2023, the end date specified in your application.

Please note the following points:

- the above ethics approval number must be quoted in all correspondence relating to your research, including emails;
- if you wish to make any substantive changes to your project you must inform the Faculty of Medicine Ethics Committee as soon as possible.

Please note that this email will now constitute evidence of ethical approval. Should you require a paper signed copy of this approval, please contact the FoMEC Administrative Team via email at: medethic@soton.ac.uk. We wish you success with your work.

Yours sincerely

Dr Tracey Newman

Vice-Chair of the Faculty of Medicine Ethics Committee

H.2 Southampton ethics application form

Application for Ethics Approval to the Faculty of Medicine Ethics Committee for RESEARCH

DETAILS OF APPLICANT AND SUPERVISOR RESPONSIBLE FOR PROJECT (where applicable)

Please Tick (□)

Undergraduate □ Masters □ PhD □ Staff □

NB Staff should always tick the 'staff' box

Applicant Title Miss Applicant Forename Heather Applicant Surname Mozley

University Department Address

These MUST be current addresses as this is where correspondence will be sent.
MEDU, Building 85, University of Southampton, University Road, Highfield, SO17 1BJ

H.Mozley@soton.ac.uk 07XXX XXX XXX

Current Post Postgraduate researcher in Medical Education

Signature

Date

Name of course if project forms part of a course of study (e.g. PhD/BMedSc/BM5/BMEU) PhD Medical Education

Supervisor

(name and title) Dr Sally Curtis S.A.Curtis@soton.ac.uk

Current post/ Division /School & institution BM6 Programme Lead, Faculty of Medicine

Signature Date

Short Title of Study (Maximum Six Words): Perceptions of diversity in medical school

Full Title of Study (for which approval is sought): Exploring perceptions of widening participation and student diversity in a UK medical school

Completion date: January 2023

NOTE – please ensure this matches the date in your IRGA form.

Version number and date of completion of application form: V2

Committee use only:

Received date and submission no: Decision and date:

Full Approval number

DETAILS OF RESEARCH PROPOSED

Short Title of Study (Maximum Six Words): Perceptions of diversity in medical school

1. BACKGROUND TO PROJECT

Please use language suitable for the non-specialist reader

a Key research questions

The main research question to be addressed by this study is:

How are students on different medical degree programmes perceived by their peers?

Subsidiary questions to be explored are:

1. What do students and staff understand about widening participation to HE and to medicine

2. What do staff and students understand about the range of different medical degree programmes delivered at Southampton?

3. Do students on different medical degree programmes interact socially and academically?

4. Does interacting with students from non-traditional entry programmes (BM6, BM4, BM(EU) and BM(IT), described below) backgrounds have any perceived impact on students studying on the traditional-entry programme (BM5)?

Specify the key questions that your study is designed to address

b Background to Study/Summary of Literature

Despite significant resources being invested in Widening Participation (WP) programmes to increase socio-economic diversity in the medical profession it remains one of the most socially exclusive professions, and applications by students from low socio-economic backgrounds remain low1-2. A range of literature documents several reasons why the profession is struggling to diversify and recruit students from lower socio-economic backgrounds3-4. Some evidence is emerging to demonstrate the success of these programmes in attracting students from a range of backgrounds onto medical degrees5, and supporting them to completion and into the profession (albeit at a slightly lower rate than their peers from more traditional backgrounds)6.

An expanding body of research demonstrates the benefits of undertaking a medical degree for the individual SURGs enrolled onto WP programmes. There is some evidence showing how diversity can positively impact the medical education environment, although most studies focus on racial and ethnic diversity in the United States7-8. Two studies demonstrate one positive outcome of socio-economic diversity in the profession; that doctors are likely to serve in a region similar to which they come from (typically more deprived and under-served communities)7-8. However, research on advantages of socio-economic diversity in medical schools is limited, and there is a dearth of research exploring the wider impact of WP initiatives and of socio-economic diversity in the medical school education environment.

The University of Southampton offers a wide range of programmes for students to undertake to achieve a medical degree. The traditional-entry programme, lasting 5-years, is labelled BM5. ‘Non-traditional’ entry programmes include those to attract and support students from other countries (BM(EU) and BM(IT)), a 4-year graduate programme which recruits mature postgraduate students (BM4) and a 6-year ‘Gateway’ programme for students from WP backgrounds (BM6). A WP background refers to a student meeting one or more of the following eligibility criteria:

- First generation applicant to higher education
- Parents, guardian or self in receipt of a means-tested benefit
- Young people looked after by a Local Authority
- In receipt of a 16-19 bursary or similar grant*
- In receipt of free school meals at any point in Years 10-13
- Living in an area with a postcode which falls within the lowest 20 per cent of the Index of Multiple Deprivation (authenticated by the University), or a member of a travelling family

Being enrolled onto a particular degree may therefore serve as an indicator of diversity, due to the requirements for programme admission. Having responses from students in focus groups for each programme should therefore provide diversity across a broad range of factors such as age, race, ethnicity, cultural background, previous educational experience, parents’ education, socio-economic background. This should therefore provide a range of perspectives. Staff responses will provide an ‘outsider’ perspective.

This study will explore staff and students' understanding of the various programmes, and their perceptions of students on the various programmes. It will also explore perceptions about what students from different backgrounds 'bring' to the medical school undergraduate education environment.

The study aims to provide some insight into the social setting experienced by students from diverse backgrounds enrolled onto a medical degree. It may shed light on some of the challenges experienced by SURGs in this environment, and also some of the unique qualities and value that they bring to the learning experience of the broader cohort.

References

1. Steven K, Dowell J, Jackson C, et al. Fair access to medicine? Retrospective analysis of UK medical schools application data 2009-2012 using three measures of socioeconomic status. Bmc Medical Education. 2016; 16.

2. Alexander K, Palma T F, Nicholson S, Cleland J. 'Why not you?' Discourses of Widening Access on UK medical school websites. Medical Education 2017; 51

3. Greenhalgh T, Seyan K, Boynton P. 'Not a university type': focus group study of social class, ethnic and sex differences in school pupils' perceptions about medical school. BMJ 2004; 328: 1541-4

4. Mathers, J, Parry, J. Why are there so few working class applicants to medical schools? Medical Education 2009; 43; 219-228

5. Curtis S, Blundell C, Platz C, Turner L. Successfully widening access to medicine. Part 1: recruitment and admissions. Journal of the Royal Society of Medicine. 2014; 107; 342–346

6. Curtis S, Blundell C, Platz C, Turner L. Successfully widening access to medicine. Part 2: Curriculum design and student progression. Journal of the Royal Society of Medicine. 2014; 107; 393–397

7. Guiton G, Chang M J, Wilkerson L. Student Body Diversity: Relationship to Medical Students' Experiences and Attitudes. Academic Medicine. 2007; 82

8. Morrison E, Grbric D. Dimensions of Diversity and Perception of having learned from individuals from different backgrounds: the particular importance of racial diversity. Academic Medicine. 2015; 90; 937 - 945

9. Puddey I, Mercer A, Playford D E, Pougnault S, Riley G J. Medical student selection criteria as predictors of intended rural practice following graduation. BMC Medical Education. 2014;14:218

10. Dowell J, Norbury M, Steven K, Guthrie B. Widening access to medicine may improve general practitioner recruitment in deprived and rural communities: survey of GP origins and current place of work. BMC Medical Education; 2015;15: 1–7.

Summarise the relevant literature and explain how the idea for the study evolved (max 250 words). Please include key references

c Study Design

This is an initial exploratory study designed to inform the development of research questions for a subsequent, larger qualitative study. A qualitative methodology will be employed, using focus groups as the preferred data collection method. Focus groups are an ideal tool for exploring under-researched topics where there is little empirical data, as they can elicit a wide range of perspectives and understandings about an issue. Focus groups have also been chosen as their ability to 'mimic' every day conversation creates a comfortable and familiar social environment in which rich and 'naturalistic' data can be collected1.

References

1. Clarke, V., & Braun, V. Successful Qualitative Research: A Practical Guide for Beginners. London: Sage. 2013

E.g. cross-sectional observational study

2. SAMPLE AND SETTING

a Specify and justify study size

It is expected that 52-104 participants will be recruited in total, including 4-8 participants for each of the targeted groups (outlined in 2c). These numbers are recommended by Braun and Clarke1 for collecting high quality data and to ensure a diverse range of viewpoints are included, while enabling the researcher to manage the group easily.

In all, up to 13 focus groups will be conducted over several weeks (although it is likely to be fewer). This number allows for the potential of holding separate focus groups for each group listed below.

FG number	Student groups: Degree Programme	Year of study
1	BM4	1
2	BM4	2
3	BM5	1

4 BM5 2

5 BM5 3

6 BM6 1

7 BM6 2

8 BM6 3

9 BMEU 1

10 BMEU 2

11 BMIT 3

Non-student groups

12 Academic staff

13 Admin staff

However, it is unlikely that each potential group will have enough volunteer participants to be run separately and student groups may therefore be combined (e.g. BM5 and BM6 students together, due to convenience of having timetabled sessions together and therefore being located together and available to participate at the same time).

Having multiple groups and programmes represented will allow the researcher to compare the responses and identify any patterns and similarities, as well as differences in experiences or perceptions.

References

1. Clarke, V., & Braun, V. (2013). Successful qualitative research: A practical guide for beginners. London: SAGE.

Include sample size calculation, if applicable

b Setting

Southampton General Hospital or Highfield Campus (dependent upon staff and student timetables). Student Focus groups will be carried out in private, quiet and comfortable rooms; medium-sized classrooms will be chosen, firstly to accommodate a small group, and secondly as all participants will be familiar with and comfortable in an educational environment. Staff focus groups will be carried out in appropriate teaching or meeting rooms. Refreshments will be provided.

Specify where the study (data collection) will be conducted

c Details of proposed participants/sample

There are multiple groups of interest for this study:

1. Students:

a. BM4 students in any year of their degree

b. BM5 students in any year of their degree

c. BM6 students in any year of their degree

d. BM(EU) students in their first and second year of the degree

e. BM(IT) students in their third year of the degree

2. Clinical and academic staff who teach on the medical degree programmes

3. Administrative staff who interact with students enrolled onto the medical degree programme.

As the above table suggests, the research will primarily focus on students in years 1-3 as medical students are easier to access in their pre-clinical years of study, and this will also keep the numbers of participants manageable. Participants may be recruited from later years of study if participation in low from students in years 1-3. It is likely that students in their clinical years will be more specifically recruited in the larger, follow up study in order to capture their perspectives.

The initial aim is to conduct focus groups with students from each programme separately, in separate year groups as it is anticipated this may facilitate a fuller and less inhibited discussion. However, if interest in participating is low, then programme groups can be mixed (i.e. BM6 year 1 and BM5 year 1 students in a group together). This may be a particular issue for the BM(IT) students as there are only a small number of students on the programme.

Student focus groups will be scheduled following timetabled sessions. As many of the timetabled sessions are for integrated programmes, the students will be asked to self-identify and sign up to a focus group intended for their particular programme (e.g. BM6 Y1 Focus group or BM5 Y1 focus group). Times and locations of each focus group will be decided in advance and advertised to students. If they wish to take part in a focus group but cannot make the allocated time for their group, they can leave a comment on the form and can join a different group. They will be emailed a reminder of their session the day before.

Students across all programmes are to be recruited to compare and contrast the experience of diversity from a range of perspectives, from traditional and non-traditional entry courses. By recruiting students across multiple year groups, it will be possible to

explore students' experiences throughout the student lifecycle and identify themes that develop over time, as exposure to the cohorts is increased.

Focus groups for staff will be scheduled at lunchtimes of following short meetings at Highfield or Southampton General Hospital.

E.g. fellow students/cohort no/year. Etc

d Relationship of participants/sample to researcher

The researcher has no direct relationship with the participants. The research supervisor, Dr Sally Curtis, is the BM6 programme leader, and BM6 students have given her permission to contact them about research opportunities; these students may be approached with an email from her if participation is low when invited by the researcher.

Outline your relationship with participants in the proposed sample and confirm that you have permission to contact the participants. Provide letters of collaboration, where applicable.

e How will participants/sample be identified

1) Students: The researcher will contact module leaders for the relevant years of the programmes to identify timetabled sessions. The researcher will approach the relevant lecturer to ask permission to address the students before or after their lecture, where the researcher will inform students about the study. Students will self-identify which programme they are undertaking

2) Clinical and academic staff The supervisor will provide a list of module, year and programme leads for the researcher to use to contact staff.

3) Administrative staff The Academic Registrar for the Faculty of Medicine has been approached and has agreed to email members of The Student and Academic Administration team who interact with a range of students enrolled onto the programme on behalf of the researcher

f How will participants be approached and recruited

1. Student groups: With permission from academic staff, the researcher will attend students' academic sessions. Students on the various BM programmes will be informed about the study through a notice at the end of a lecture. Students will be given the opportunity to ask questions of the researcher and read (and take home) a detailed participant information sheet (see attached). Students will be directed to the

researcher's contact information so that they feel comfortable getting in touch with any questions. Interested students will be asked to sign up to pre-arranged focus groups, and provide their name, email address and which programme they are on. A reminder email will be sent to students the day before the focus group (see attached email).

The aim is to recruit a purposive sample for each programme, including students from different years of study, both male and female. However, it is appreciated that this may not be possible, depending upon uptake, and a convenience sample may have to suffice.

2. Academic/clinical staff: The researcher's supervisor will provide email addresses for the academic programme, year and module leads for the programmes. Teaching and clinical staff will be approached via email, with a brief introduction to the study, a participant information sheet and a consent form. The researcher will provide contact details and details about the time and location of the focus groups, and offer to discuss the research further by email. The FG will take place at lunch time or after a staff meeting; any interested staff will be asked to indicate their interest by emailing the researcher before the meeting.

3. Administrative staff: Administrative staff will be approached by email from the Academic Registrar for the department, with a brief introduction to the study, a participant information sheet and a consent form. The researcher will provide her own contact details and details about the time and location of the focus groups, and offer to discuss the research further by email. Any interested staff will be asked to indicate their interest by contacting the researcher and letting her know their availability.

If a recruitment poster is to be used, provide a copy. Please refer to the example poster.

g State inclusion and exclusion criteria and screening tools, if applicable

Inclusion criteria: A number of focus groups will be conducted, with different participants eligible for each group:

1. BM4, BM5, BM6, BMEU and BMIT medical students.

2. Clinical and teaching staff from the faculty of medicine who teach on any of the above programmes.

3. Administrative staff who interact with a students enrolled onto the programmes.

h How will consent be obtained

Students will be given an overview of the research and their role as a participant during the notice after a lecture. Any interested student will be given a comprehensive participant information sheet and consent form to read, followed by an opportunity to ask questions.

Staff will be given the same information via email; a participant information sheet and consent form will be attached.

All potential participants will have a week between hearing about the study and making an informed decision about whether to participate. When they arrive for the focus group, they will be reminded about the study and have another opportunity to ask questions before being asked to sign an informed consent form if they agree to take part (see attached).

i Will participants be given written information? (include Patient Information Sheet (PIS) in application) Yes □ No □ If no, why?

j Will participants sign a consent form? Yes □ No □ If no, why not?

Tick 'yes' or explain why not (e.g. may not be required for questionnaires). Include copy of consent form where appropriate. Include consent form in application where appropriate

k Explain how participant/sample anonymity and/or confidentiality will be maintained?

Consent forms will be kept in a locked cabinet in the Medical Education Development Unit. Audio recordings and transcripts will be stored on the researcher's password protected network area. After the researcher has verified transcriptions, audio recordings will be deleted. Transcripts will be anonymised.

Participants will not be identifiable in the PhD report or any subsequent publications. All participant data will be link anonymised using study codes. Quotes will be attributed to participant number, programme and year group to aid comparisons (e.g. Participant 3, BM6 Y1). Demographic data will only be presented collectively.

The participant information sheet will cover issues around anonymity and confidentiality and this will be discussed with participants prior to signing the consent form. Discussing confidentiality is particularly important for focus groups; participants will be informed that they should not discuss the content of the focus group to anyone in a way that might identify other participants. They will agree to this through signing the consent form.

If the researcher is concerned about the immediate safety and wellbeing of the participants or other students mentioned by the participants, she will disclose this to the faculty senior tutor only. The participants will be informed of this course of action before they give their consent to participate in the study.

Anonymity:

i) Unlinked anonymity - Complete anonymity can only be promised if questionnaires or other requests for information are not targeted to, or received from, individuals using their name or address or any other identifiable characteristics. For example if questionnaires are sent out with no possible identifiers when returned, or if they are picked up by respondents in a public place, then anonymity can be claimed. Research methods using interviews cannot usually claim anonymity – unless using telephone interviews when participants dial in. Unlinked data cannot be withdrawn.

ii) Linked anonymity - Using this method, complete anonymity cannot be promised because participants can be identified; their data may be coded so that participants are not identified by researchers, but the information provided to participants should indicate that they could be linked to their data. Linked data can sometimes be withdrawn.

Confidentiality – The non-disclosure of research information except to another authorised person. Confidential information can be shared with those who are already party to it, and may also be disclosed where the person providing the information provides explicit consent.

3. INTERVENTIONS AND MEASUREMENTS

a What will happen to the participants/sample?

Participants will take part in a focus group, facilitated by the researcher. The researcher will undertake training in facilitating focus groups before they are held with students and staff. The focus groups will be audio recorded (this will be included in the consent form).

Focus groups will be arranged at convenient times and locations for participants; for student groups, groups will be scheduled for after a class, with provision of a comfort break.

The focus groups are expected to last around 50 minutes, but participants will be asked to allow 1 hour to accommodate lateness or over-running.

The researcher will outline ground rules, including a discussion on the importance of confidentiality, which they agree to by completing the consent form. Participants will have an opportunity to ask questions and complete their consent forms before beginning the focus group.

The discussion prompts will follow the structure on the focus group framework (attached), with follow up questions asked if appropriate. The discussion will be audio recorded.

At the end of the discussion, the researcher will remind participants again about maintaining confidentiality. All participants will have a chance to ask any questions at the end, and student participants will be given information about support services available to students in the faculty and University in case the discussion has raised any personal concerns

Specify what participants will be asked to do and for how long they will be asked to do it. Ensure that demands on the participants (including time and travel) are reasonable.

b Explain what will be measured/explored and how

Through the semi-structured focus group discussions, data will be collected to cover the key research questions outlined in section 1a, using the prompts outlined in focus group framework (attached). This method also allows flexibility to explore and discuss any other issues that emerge through the research process, and participants will be invited to share any others thoughts or opinions that weren't covered at the end of the session.

The researcher will organise and facilitate the focus groups. A company used by the Medical Education Development Unit will carry out most of the transcription. The researcher will transcribe the first few recordings herself to get a feel for the data and to help identify possible areas for exploration in subsequent focus groups

Provide copies of relevant documents (including questionnaires and interview frameworks) and confirm that permission to use them is in place. Ensure that the role of all assistants and/or collaborators is made clear. Comment on the validity and reliability of the proposed tools.

c Outline how the data will be analysed

All audio recordings of the focus groups will be transcribed. The data will be analysed using an inductive, thematic approach, outlined by Braun and Clarke1. The first 2 transcripts will be coded by the researcher and supervisor separately. The researcher and supervisor will then meet and the codes will be discussed and agreed. The agreed codes will then be used to develop a coding framework, which will be further developed as more focus groups are analysed and applied iteratively to the transcripts. NVivo software will be used to aid data management. From the codes, emergent themes will be identified and discussed with the research team. The themes and codes will be used to address the research questions.

References

1. Braun, V. and Clarke, V. Using thematic analysis in psychology, Qualitative Research in Psychology; 2006; 3, 2; 77-101.

4. MANAGEMENT OF THE STUDY AND RISKS INVOLVED

a Is this a pilot study? Yes No X

If not, outline what pilot work has already been completed or outline the pilot work that will be carried out as part of the project, as applicable

Initial exploratory study to refine research questions for the subsequent main study

Specify the decisions to be made before the main study (e.g. procedures to be clarified)

b Outline the potential risks/harm to participants in the study (including the researcher/s)

1. Within group research, there is a risk that participant's views or attitudes could be offensive to other participants, which could be upsetting or distressing.

2. Issues around participants breaking confidentiality.

3. The topic being discussed has a focus on diversity. If participants have had negative experiences of diversity, reflecting on and sharing their experiences might be difficult, particularly if other participants are not supportive.

4. Issues around researcher maintaining confidentiality - Students may be concerned that their views will be shared with the faculty through the researcher's supervisor's involvement in the programme. Staff may be concerned about discussing their experiences with students in a negative way

c How will you attempt to prevent the potential risks/harm from occurring?

1. Offence: The moderator will outline ground rules before the focus group begins, including being considerate of other people's opinions and being polite at all times.

2. Participant confidentiality: The importance of and reasons for maintaining confidentiality will be outlined in the participant information sheet, and discussed with participants prior to starting the focus group. The consent form will include participant agreement to confidentiality.

3. Sensitive topic: Participation in this study is completely voluntary. Before the interview they will be reminded that they do not need to contribute to all of the questions, and that they are able to pause or leave the focus group at any time. Unfortunately, withdrawal after participating in the focus group will not be possible as it is difficult to remove one person's contributions based on the sound of their voice. This will be clear in the participant information sheet and consent form, and verbally reiterated before the focus group begins. Participants will also be reminded about the anonymising process. If a participant is particularly concerned about their contribution,

the researcher will discuss this with the participant and consider removing the entire data set.

4. Researcher confidentiality: In the information sheet, and before the focus group begins, participants will be told that their contribution is confidential, unless the researcher feels a participant is at risk of harm.

Participants will be informed that if the discussion raises issues that they wish to discuss further, they can be referred on to the faculty pastoral tutors.

Participants will be provided with a list of faculty and university support services. Participants will be informed that if they indicate intent to harm themselves, or that other students may do so, the researcher will discuss their disclosure with the faculty senior tutor for advice.

d How will you manage any that do arise?

1. Offence: The moderator will move the subject on if she feels that anything that might cause offence has been said, or if any participants appear visibly distressed. If any participants do appear distressed, the moderator can pause the recording and speak privately with participants, and remind them that they can leave the focus group at any time if they wish.

2. Participant confidentiality: If participants are concerned about confidentiality, they are encouraged to discuss this with the researcher

3. Sensitive topic: After the interview, participants can be referred on to faculty senior tutor if necessary. In addition, a list of other university support services will be provided.

4. Researcher confidentiality: If participants indicate intent to harm themselves, or that other students may do so, the researcher will discuss their disclosure with the faculty senior tutor for advice. Participants will be informed of this process before consenting to take part.

Explain the steps taken to manage any discomfort and/or distress etc (e.g. a helpline telephone number)

e How will data be stored securely during and after the study?

Consent forms will be kept in a locked cabinet in the Medical Education Development Unit; all data will be managed during the research process using pseudonyms (including on transcripts).

Audio recordings and transcripts will be stored on the researcher's password protected network area. After the researcher has verified transcriptions, audio recordings will be deleted. The Medical Education Development Unit will keep the interview transcriptions for 15 years; in line with the Data Protection Act.

Please note: Faculty of Medicine research conduct guidelines require data to be stored for 15 years. Audio recordings should be deleted following transcription.

f Raise any ethical problems not covered elsewhere and how you will deal with them.

Lunch or refreshments will be provided to participants as a thank you for taking part in the study. This means that it is possible to run focus groups over a lunch or break time without concerns that participants would not be eating during their break. The focus groups will be scheduled to ensure that participants have a comfort break between their classes and the focus group.

Providing refreshments may serve as an incentive to encourage more participants to engage with the study; however, it is proportionate to the time commitment involved in participation, and appropriate for the proposed timings of the focus groups (during typical break times to avoid risk of participants missing important classes).

Highlight any additional ethical issues not covered elsewhere on the form (e.g. where the topic of an interview is sensitive or may cause friction between parties).

H.3 Student Participant Information Sheet (Southampton)

Participant Information Sheet

Study Title: Exploring perceptions of widening participation and student diversity in a UK medical school

Researcher: Heather Mozley, Postgraduate researcher in Medical Education

ERGO number: 47542

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

I am a PhD student at the University of Southampton, and I am carrying out this research as part of my PhD project.

The PhD is part of a project to explore how people involved in the medical school degree programmes perceive diversity within the student body. It will examine students' and staffs' understanding of different medical degree programmes, and their experiences with different groups of students on these pathways.

Why have I been asked to participate?

You have been asked to participate because you are enrolled onto a medical degree programme at the University of Southampton. Students from each programme will be asked to participate in the study, as well as some staff involved with the programme.

What will happen to me if I take part?

If you are interested in taking part in this focus group, you will be emailed with the time and location of the focus group. A consent form will also be emailed to you, and will be available at the focus group itself. Please do email me if you have any questions.

When you arrive, there will be time to ask questions, then you will need to sign the consent form to show that you understand what the study is and that you're happy to be involved.

Before we begin, all participants will be introduced to each other and I will explain some ground rules. You will then take part in a focus group; discussing your ideas about questions I will ask to the group.

I expect that the focus group will last 45-50 minutes, but please allow 1 hour to accommodate for lateness or over-running. I will ask the group about your understanding of the different medical degree programmes that are run at the university, and about your experiences of working or socialising with students from the different programmes. The interview will be audio recorded and transcribed – you will need to agree to this in the consent form.

The transcripts from each focus group will be analysed and compared to find out if there are any difference in participants' thought and opinions.

Are there any benefits in my taking part?

Yes! Your contribution will help us to better understand the impact of diversity on the medical school education experience.

As the focus group will be held over lunchtime, lunch will be provided. Please do get in touch on the contact details below if you would like to take part and have any dietary requirements or allergies

Are there any risks involved?

The focus group will take around an hour of your time, but every effort will be made to minimise inconvenience and to ensure your comfort.

Some people feel uncomfortable sharing their personal experiences and issues with a group, and/or a researcher. Please be aware that you do not have to answer or contribute to any question or disclose any information if you don't wish to do so.

Every participant who consents to taking part is also agreeing to keep the discussion confidential: that means that you, and everyone else involved, should not discuss the content of the focus group with anyone in a way that might identify any individuals who took part.

If any of the data collection process brings up issues you wish to discuss further, we will be able to refer you on to more expert sources of support.

What data will be collected?

Background data on your ethnicity, gender identity, age and medical programme you are enrolled on will be collected to identify how representative the research sample is.

Audio recordings of the interviews will deleted once they have been transcribed (written). The transcriptions and your background data will be kept confidential and handled securely; hard copies will be kept in a locked cabinet in the University of Southampton. Electronic data will be kept on a password-protected sub-folder of my University of Southampton network in accordance with the Data Protection Act. Consent forms will be kept separately from your background data and the transcriptions so that you cannot be identified.

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

All participants taking part in focus groups will sign a form to agree to keep the identity of all participants confidential, but this cannot be guaranteed. However, your participation and the information we collect about you during the course of the research will be kept strictly confidential by the researcher.

All data will be stored securely as described above.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

You can inform me by signing up in person or via the below email address that you want to take part.

What happens if I change my mind?

You have the right to change your mind and withdraw any time before participating in the focus group without giving a reason and without your participant rights being affected. However, due to difficulty of removing an individual's contributions to a focus group based on the sound of their voice, you will not be able to withdraw after the focus group has been conducted. You may leave at any time during the focus group, but we

will keep the information about you that we have already obtained for the purposes of achieving the objectives of the study only

What will happen to the results of the research?

The results of the study will be written up and submitted in my PhD thesis.

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

Where can I get more information?

If there is anything that is unclear, or you would like more information, please feel free to contact me (contact details below).

Thank you for taking the time to read this information sheet.

Contact details:

Lead researcher

Heather Mozley

Postgraduate Researcher

Medical Education

Faculty of Medicine

University of Southampton

Building 85

Highfield Campus

Southampton

SO17 1BJ

Email: H.Mozley@soton.ac.uk

Tel: 023 XXXX XXXX

Research supervisor

Dr Sally Curtis

BM6 Programme Leader

Medical Education

Faculty of Medicine

University of Southampton

Building 85

Highfield Campus

Southampton

SO17 1BJ

Email: s.a.curtis@southampton.ac.uk

Tel: XXX XXXX XXXX

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk).

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 10 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Thank you.

Thank you for taking the time to read the information sheet and considering taking part in the research.

H.4 Student consent form (Southampton)

Study title: Exploring perceptions of widening participation and student diversity in a UK medical school

Researcher name: Heather Mozley, Postgraduate researcher in Medical Education

ERGO number: 47542

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (1st February 2019, v1) and have had the opportunity to ask questions about the study.

I agree to take part in this research project and agree for my data to be used for the purpose of this study.

I understand my participation is voluntary

I understand that taking part in the study involves audio recording which will be transcribed and then destroyed for the purposes set out in the participation information sheet.

I understand that my data cannot be withdrawn from the study after the focus group has begun.

I understand that my anonymity cannot be guaranteed in these discussion forums but that any information collected by the researchers will be kept confidential and participants will be asked to keep the discussions confidential.

I understand that I must keep the discussions confidential

Name of participant (print name)……

Signature of
participant……..

Date……..…….

Name of researcher (print name)……

Signature of researcher ……

Date……

H.5 Interview Framework (Southampton):

Focus group framework

Study title: Exploring perceptions of a diverse student body in a UK medical school

Date:	**Location:**	**Moderator:**

Time:	**FG number:**	**Participant group:**

Introduce self and study

You are here today to participate in a research study exploring the perceptions of widening participation and diversity in the student body at medical school. The purpose of this study is to increase understanding of how medical students perceive the different medical degree programmes offered here and to understand how students from these different programmes interact and integrate.

How focus groups work:

During this focus group, I will be asking a series of open-ended questions to the whole group. When you want to contribute, you should address your answers to everyone in the room (not just me). The idea of a focus group is that it's like a conversation, so you can bounce ideas off each other; agree, disagree, ask questions and discuss your thoughts and feelings together. To make sure we stay on time, I may need to move the discussion along to the next question, but I will try to wait until everyone has had a chance to say something.

I will be recording the interview (audio only), and the recording will be transcribed. I will also be taking notes in case there are any technical issues. Your answers will be confidential unless I am concerned that there's a risk of harm, a pseudonym will protect your identity, and nothing you say in this space will impact on your progress at university.

You do not have to answer or contribute to all of the questions so please do not feel obliged to do so. You may leave at any point during the focus group, but I will not be able to withdraw your contributions to the discussion.

Ground rules:

- Maintaining the confidentiality of the group – you can talk to friends and family about taking part in the group and what we talked about – but you must not identify anyone in the group, either by name or by any identifying characteristic.
- Respecting everyone's opinions and ideas – you can disagree but you should do so politely. Don't interrupt or shout over someone.

Informed consent

Please sign the informed consent form signalling that you understand the study and your willingness to participate. If you have any questions, please let me know now.

Begin recording

Participant introductions

Ice breaker: name, where were you born, what's your favourite food (or cuisine)

Questions

1. What do you understand about Widening Participation in Higher Education?
    a. What do you think it means?
    b. Is it important?
    c. Why do universities do WP activities?

2. What is your understanding of Widening Participation in Medicine?
    a. What sort of WP things do unis do?
    b. What are the aims?
    c. Is it important for medicine?

3. What do you know about the different programmes of study here at Southampton?
    a. How do students get on to the programmes?
    b. Are there any differences in the content or structure?

4. What are your perceptions (if any) of the students studying the different programmes?
    a. Have you noticed any differences?
    b. Can you describe any differences?

5. Can you describe any experiences you have had of studying or learning with students from different programmes?
6. Do you socialise with students on the different programmes?
7. What, if anything, do you think the students from the different programmes bring to the learning environment?

End (stop recording):

Thank participants for taking part, reminder about confidentiality

Appendix I Field notes following a focus group (Aberdeen example)

It's fascinating how each group has had a different conception of diversity, each very much tailored around their own experience of what it means to perhaps different from the stereotypical medical student. Group X students focused very heavily on being from rural backgrounds and the advantages and disadvantages that confers to students.

Again, it was quite difficult for students to talk much about difference and integration. They formed close and meaningful friendships in their G2M year and still remained friends as they progressed to the medical degree, but largely dispersed and integrated very well into the medical school. This was largely attributed to the structure of the course where they were often put into small groups, separated from their fellow G2M graduates. They felt that they greatly benefited from diversity through learning about the lifestyles and experiences of people from other backgrounds, but that this came through friendships rather than being something that was, or should, be facilitated by the university.

Of course, the conversation became increasingly interesting once we had switched off the microphones!

We spoke about the Scottish government trying to 'cling' to Scottish students; attract, educate and keep locals in their community. This is very different from UoS, who aim to recruit SURGs from all over the UK. While keeping locally 'sourced'(?) doctors can be beneficial, so they have a good understanding of the local context and can use this knowledge in their practice, there are other obvious benefits of exploring the world and seeing life from a different perspective; going away doesn't stop people from coming back!

We also spoke of the value of putting students into deprived communities for their clinical placements, to gain an understanding of the reality of lived experiences outside of their own small bubble. This was considered to be perhaps more valuable than having diversity within the cohort.

I mentioned to KG (my colleague at Aberdeen) that it was interesting how some students think diversity mostly means rural origin, and others felt that it was SES. KG suggested that this is because the G2M cohort 1 were predominantly rural, whereas cohorts 2 and 3 have included more low SES students. I mentioned that I was surprised that when specifically asking about diversity, they just discussed WP indicators like SES, which contrasted by Southampton experience where everyone seemed to default to culture/religion etc (which are not WP student criteria). KG wasn't sure what the general ethnic make-up of the medical school was, it will be interesting to see this. Perhaps fewer 'visible' indicators mean that there's less awareness/consideration? Perhaps racial discrimination isn't felt as an issue here and not something that is considered 'different'?

Overall, I'm finding that people at Aberdeen are struggling much more than UoS participants to say much about the benefit of having a diverse cohort on the learning experience. They acknowledge it is a positive - to benefit future patients by having

increasing awareness and empathy for their contexts (through sharing stories about their lives, socially with friends). It just seems obvious, that it just ***is***. There shouldn't be need to justify it – AND they are much more concerned with potential issues like standardisation minimising difference and fears of over-generalising what can be 'learned' from someone from a different culture, for example. As one participant said after the recording stopped: people are just people!

Appendix J Example of early UoS focus group transcript analysis and original thematic maps

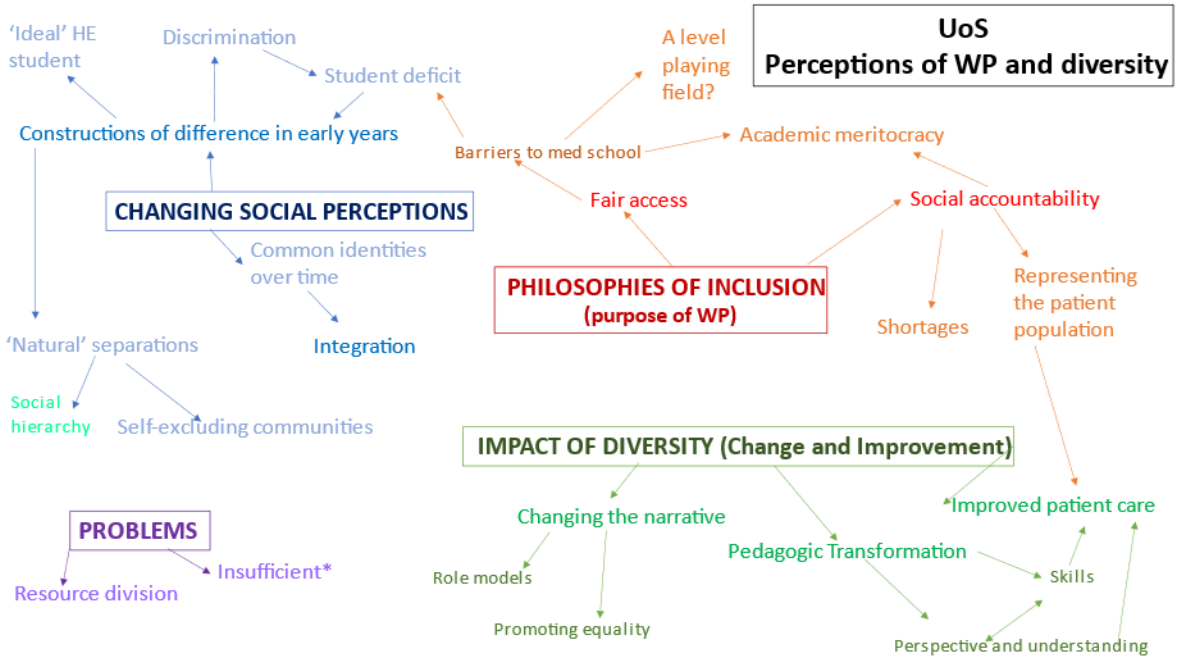
J.1 Early coding framework

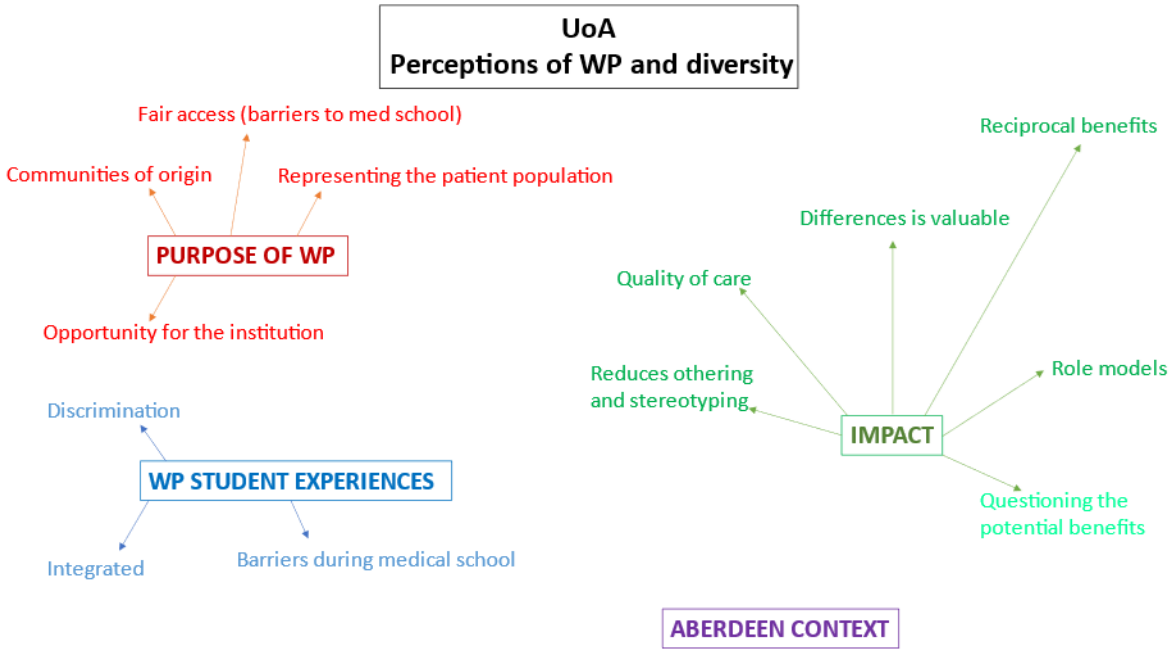
Theme / Code	*Definition*	Sub-codes	Sample quote
1. Perception of WP, and of medical school admission, as "levelling the playing field"	*WP is considered to equalise prior differences between students from different backgrounds*		"to get you to where you want to be, so, you can work with or be on the same level as people who don't come from disadvantaged backgrounds, it helps you, it propels you to that level." (BM6 Y1)
BM6 stigma	*A sense of being negatively perceived, or compared to BM5 students, often from BM6 students themselves; occasions of explicit prejudice*	BM6 transition; personal issues; assumptions; deficit	"some perceptions can be ethnic minorities, that kind of need this extra year" (BM6 Y2)
Some differences	*Most groups were able to identify some stereotypes about students on different courses, predominantly relating to work ethic and confidence*	Academic performance; Confidence; social advantages; cost of study	"up until the end of the second... year, the BM4 students have an advantage in that they have a better, innate social confidence, and just in their history taking and their communication." (Teaching staff)
No differences	*Many groups felt that all students studying medicine are equal. Differences could be attributed to individual variation rather than social or cultural factors. Generally, academic performance was perceived as almost equal*	Academic performance; individual difference	"we're different individuals who are learning in different ways... that's nothing to do with cultural differences," (BMEU Y2)

1. WP as beneficial to the individual: the meritocratic discourse	*WP predominantly positioned as a positive opportunity provided to individuals*		"education is a right for everyone, or should be a right for everyone, and it improves your life and so many other areas as well, and your self-esteem" (BMEU Y2)
Providing opportunities	*WP portrayed as a largely one-way process of universities providing for individual students*	Equality; social mobility; social justice	"widening access is giving a chance to the students who otherwise wouldn't have had the opportunity, and whether that's reducing grades, or just offering offers specifically to them" (Admin staff)
Removing barriers (discourses of disadvantage)	*A wide range of potential barriers to accessing medicine identified, including problems with the system and society*	System (uni admissions); Psychological (aspirations, confidence); Social (under-represented groups)	"these courses, that are saying you can get this grade, you can get that grade, this background, and I just felt like wow, like this isn't closed off to me, I can still be a doctor" (BM6 Y2)

1. WP as beneficial to the profession	*Broader rationales for implementing WP (less emphasised)*		"I do know that there's some theories that if WP, students are more likely to go back into their own communities" (Admin staff)
A means of addressing shortages	*WP conceived as a way of addressing general shortage of doctors, and a mechanism to increase medics in places that WP students came from*	General shortages; community of origin	"we need doctors, it doesn't matter where you come from, just please come and be doctors; the NHS is like dying." (BM5 Y1)
Improving quality of care	*Participants conceived of a medical profession that represents the patient population as improving healthcare, through improved relatability and trust*	Representing the patient population	"by knowing the background of the patient, it does not only help you in communication, but also how you want to treat the patient then later." (BMEU Y2)
Improving the medical learning experience	*One benefit of increasing diversity through WP is that diverse students bring valuable knowledge and life experience; may be suited to different specialties based on prior experience*	Bring life experiences, knowledge; fostering skills and qualities	"people from disadvantaged backgrounds, can actually bring a wealth of knowledge and experience" (Admin staff)

J.2 Early thematic maps





Appendix K Critical reflections on a two-person focus group

When only two participants showed up for my focus group for BM5 Y1 students, my initial reaction was intense disappointment. I wondered whether I should conduct the focus group, or whether I should just give them the pizza and let them leave. I decided to go ahead, encourage them to have a discussion between themselves and hoped that it didn't become an awkward group interview. I would review the data later and decide whether it could be used.

Both during the focus group, and as I transcribed it, I was struck by the richness of the conversation shared between my two participants. Although both had entered medicine via the standard-entry, BM5 medical degree programme, each came to medical school from very different social and educational backgrounds: one (P1, a White male) was "*spoon-fed*" throughout his private education; his teachers had co-written his medical school application personal statement, he'd attended a UKCAT training course, and a family friend had enabled him to observe multiple orthopaedic surgeries. P2 (a White female) negotiated an endless parade of supply teachers in her poorly-performing state school, and she described an intense struggle to achieve grades below the medical school entry requirements while gaining work experience as a shop assistant in a DIY shop. Although these students were in the same cohort, neither had known the others' name before the three of us met in an echoey classroom designed to accommodate 40, surrounded by enough pizzas to feed 12 hungry students.

To my surprise, both participants honestly and openly shared personal experiences and complex emotions about their journeys to and through medical school. They enquired about, listened to, and thoughtfully reflected on their different experiences of integrating in the medical school. They non-judgementally, curiously negotiated frequently dissimilar perceptions about the social world within and outside of medical school. Their conversation revealed a great deal to me about the lived experiences of class and classism in the medical classroom, and powerfully illuminated use of reflexive discussion for enhancing inclusion and unleashing the benefits of diversity in medical schools. Here, I reflect on some themes that their discussion highlighted.

The negative impact of the medical admissions system on medical student identity was evident; medicine is competitive and students are generally required to achieve top academic grades to be awarded a coveted place on a programme. Both students repeatedly raised the importance of academic merit over any other forms of excellence as they competed over who was *less* deserving of their place in the cohort. P2 fiercely argued that "*I don't deserve to be here, because I got a B in Chemistry*", and frequently referred to herself as "*lucky*" for being awarded a place, despite overcoming significant hurdles in her pre-university education to achieve AAB at A-Level, just one grade lower than official requirements. Using language replete with gratitude ("*I was like, thanks*!") suggests she felt positioned by the institutional admissions system, or perhaps by her peers, as less worthy than others because of her pre-entry grades.

Conversely, P1 perceived himself as having unjustly benefited from the "*rigged*" system and insecure about his own place due to his self-identification as less conscientious than students from less advantaged backgrounds, "*I had quite a lot of support, and so, I kind of feel like I deserve a lot less than the people who have had no support*". Medicine is a complex field, in which academic grades represent only one of myriad

skills and competencies that medical students are expected to demonstrate to qualify as a practicing medic. Yet, academic grades take centre stage when determining who initially gains access to studying it[160,265], and also which medical students desirable placements in high status specialities after graduation[39]. It is perhaps unsurprising, then, that this conversation reveals that these participants' sense of value and belonging in the medical school, and their perceived positions on the social ladder, appeared tightly coupled with their academic achievements.

Although both participants acknowledged that social inequality plays an important role in medical school admissions, their respective experiences of medical school led to quite different perceptions of equality after enrolment. Upon entering medical school, P2 noted that "*it's still quite elite*", despite institutional efforts to increase socioeconomic diversity, "*welcome to the world of the middle class*", she laughed. She spoke emotively about her interactions with privileged peers, with predatory terms like "*dominate*" demonstrating that the experience of being a social-class minority can be an intimidating experience for students, "*I thought I'd meet everyone on my level. I realised I've actually just met people who are like higher up in the food-chain*".

P1, however, argued that medical students' backgrounds become irrelevant once they embarked on their medical degree, "*I don't think we treat people differently on the course*". Despite claiming that differences between students were, or should be, inconsequential, he nevertheless perceived these differences to both exist and impact on their quality of integration "*I think it's different now we're at uni [...] we're aware that there are richer people. I think it doesn't make us less friends with other people. Or often, we're just becoming friends with people who are around us in the world, who we're used to at home*". Social Identity Theory suggests that we do tend to be attracted to and make friends with people who we perceive as being similar to us, and research suggests that it plays a role in the friendships formed among medical undergraduates[200]. For first year medics, the attraction to and need for familiarity may be even greater as they navigate an unfamiliar maze of lecture theatres, hospital corridors and a challenging curriculum as well as the novel social experiences of university life. But an over-representation of students from socially advantaged backgrounds that enable them to fit more comfortably into the medical school in social groups may exclude other students from under-represented backgrounds, who can find it difficult to find their place[62,63].

Being more comfortable with those who are similar led these participants to naturalise class-based division and 'Othering' among students, "*just by chance [...] becoming good friends with the people who are on our level anyway*". This statement by P1 signals his position within the dominant social group and illustrates a common temptation to dismiss social differences as unimportant. The alternative perspective, that these differences and divisions are problematic for those on different 'levels', might be uncomfortable. Yet even in a statement aiming to dismiss inequality in medical school, his use of the phrase "*our level*" reinforces the idea that there is a social scale, or 'levels' within the medical student cohort and creates an 'us versus them' mentality. By denying the hierarchy, P1 effectively reinforced it, silencing challenges such as low sense of belonging that many minority students manage alongside their studies[62,63]. The power dynamics involved in the relationship between students within and outside of the dominant social group are illustrated by P2 conceding to P1 with a "*yeah*", perhaps demonstrating her reluctance to challenge the status quo and risk being further excluded.

At the beginning of the conversation, P1 admitted that he was "*not really aware" of WP, and had "never known anyone who was from that kind of area*", perhaps making it difficult to appreciate his particular privileges. He acknowledged that he had not previously reflected on inequality in the medical school, "*I've just never been aware of it*." However, following exposure to and challenges by the experiences of P2 within this short conversation, he began to appreciate his privileged position, "I *am kind of realising that I'm coming from more of the direction of the people who you're mentioning*". P1 increasingly engaged in reflection as the discussion developed, realising the limitations of socialising primarily with those who were similar to your friends from home, "*if there weren't other people on our course from different backgrounds, then we would slip into a bubble, like how at private school, everyone expects everyone to have loads of money*".

Conversely, P2 had already experienced a 'bursting' of her normal social 'bubble' by coming from a poorly performing state school and into a medical school which she perceived as "*quite elite*". This prompted her to reflect on not only her own identity, but also wider class issues in society "*I didn't really think how much social class affects people in this country, but actually it's quite relevant and prevalent*". For P2, students simply reflecting on and acknowledging their relative social position and advantages as a medical student served as a good first step for those who are and who feel marginalised and misunderstood: "*I think if you acknowledge that you have had like a head-start, it just makes everyone feel better*".

It is important for medical students, who will become the doctors that serve diverse patient populations, reflect on a wide range of societal issues and their potential and actual implications on health and healthcare provision. Recently, medical education practitioners have called for increased opportunities to engage medical students with personal, independent reflexivity around their personal identities[253,262]. However, this focus group illuminates the enormous potential for students to benefit from going a step further and sharing their reflections with others – within culturally safe and well-facilitated contexts. The data in this, and other studies [(e.g., 200)] reveal that there are limited social interactions between medical students from different backgrounds in the early years of medical school, and a reluctance to socially integrate and share personal, meaningful experiences that create vulnerability. Would P2 have volunteered her reflection about the impact of class to a student she perceived as being from a different social group outside of this discussion space? Moreover, her reflection on class issues was limited to her own experience and perceptions of the world. During the conversation, P2 also had an epiphany that stereotyping and bias can run both ways, recounting a conversation she'd had about private school students:

P2: "*I do have a really good friend who went to private school, and some of them, they're like 'you don't understand, you think I'm really rich, well I'm on the lower-ranking private school, I go to one of the cheapest ones, and my family isn't balling!', and I was like, 'no, no, no, you go to private school!*'"

P1: "*Yeah, [some of] their parents give up absolutely everything. There was a guy at my school, his dad worked three jobs, because they knew if he gets into a private school, he's going to be set for life*"

These participants' powerful reflexive journeys within a 30 minute conversation highlight the value of facilitating safe environments in which issues like classism can be

discussed without prejudice in medical classrooms. As other researchers have recommended, these can be facilitated by investing in staff training and by creating time and space for small group discussions[120,245].

Appendix L Documents relating to ethical approval for the narrative interview study: approval letters, Participant Information Sheet, Consent Form, adverts

L.1 Full ethical approval (Southampton)

Medicine

UNIVERSITY OF Southampton

7 September 2021

Heather Mozley
Faculty of Medicine

Dear Heather

Re: ERGO 62521.A3.R4 - Exploring the reciprocal benefits of widening participation in medical schools (Amendment 3)

Thank you for submitting your revisions relating to the above study. I am pleased to inform you that full approval has now been granted by the Faculty of Medicine Ethics Committee.

Approval is valid from today until 20 December 2022, the end date specified in your application.

Please note the following points:

- the above ethics approval number must be quoted in all correspondence relating to your research, including emails;
- if you wish to make any substantive changes to your project you must inform the Faculty of Medicine Ethics Committee as soon as possible.

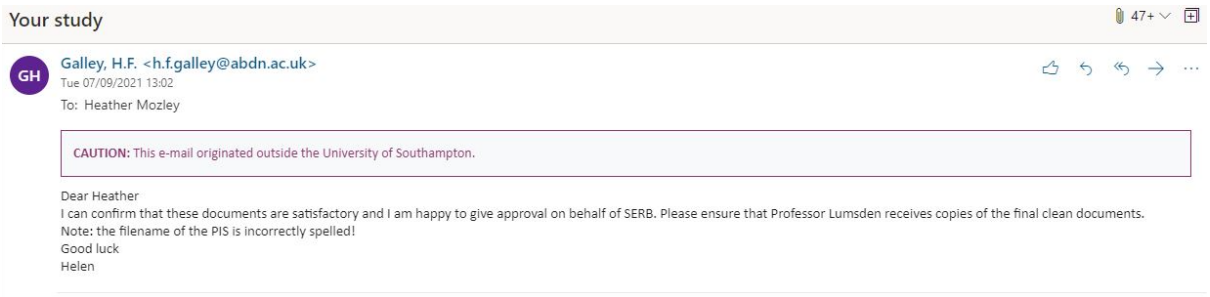
Please note that this email will now constitute evidence of ethical approval. Should you require a paper signed copy of this approval, please contact the FoMEC Administrative Team via email at: RISethic@soton.ac.uk. We wish you success with your research.

Yours sincerely

S. J. Wilson

Dr Susan Wilson
Chair of the Faculty of Medicine Ethics Committee

L.2 Conditional approval (Aberdeen)



Your study

47+

GH

Galley, H.F. <h.f.galley@abdn.ac.uk>
Tue 07/09/2021 13:02
To: Heather Mozley

CAUTION: This e-mail originated outside the University of Southampton.

Dear Heather
I can confirm that these documents are satisfactory and I am happy to give approval on behalf of SERB. Please ensure that Professor Lumsden receives copies of the final clean documents.
Note: the filename of the PIS is incorrectly spelled!
Good luck
Helen

L.3 Participant Information Sheet (Aberdeen)

Participant Information Sheet

Study Title: *Exploring the reciprocal benefits of widening participation in medical schools*

Researcher: Heather Mozley, Postgraduate researcher in Medical Education

ERGO number: **62521.A3.R4**

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form before the interview begins.

What is the research about?

I am a PhD student in the Faculty of Medicine at the University of Southampton, and I am carrying out this research as part of my PhD project.

The PhD is part of a project to explore how medical students from the University of Southampton and the University of Aberdeen perceive diversity within the student body. It will explore students' experiences with other students from different backgrounds, and the impact of their interactions on their education and/or practice. I have conducted similar interviews with students at the University of Southampton and plan to compare the responses between the two institutions.

Why have I been asked to participate?

You have been asked to participate because you are enrolled onto a medical degree programme at the University of Aberdeen. Students in Years 3-5 of a medical degree are invited to participate in the study.

What will happen to me if I take part?

If you are interested in taking part in an interview, you will be emailed to arrange a time and date that would be suitable for you. The interviews will be conducted online using Microsoft Teams.

A consent form will also be emailed to you. Please do read it carefully, and email me if you have any questions.

Before the interview begins, there will be time to ask questions, then you will need to sign the consent form to show that you understand what the study is and that you're happy to be involved.

I will explain what kind of questions I will ask during the interview, and then when you are ready, we will begin.

I expect the interview will last around 1 hour. I will ask you about your experiences of working or socialising with students from different backgrounds, and how sharing experiences with these students has affected your medical education or practice. The interview will be recorded using Microsoft Teams. Microsoft Teams can capture both audio and video recording, but I only need the audio-recording for my study. Please do feel free to turn off your camera if you prefer to be recorded audio only. I will then transcribe the recordings (write up what was said during the interview. I will anonymise your details on the transcript using a pseudonym (a fake name).You will need to agree to this in the consent form.

The transcripts from the interview will be analysed to develop an understanding of the types of experiences and interactions shared by students from different backgrounds. The findings will be compared between students at the University of Southampton and the University of Aberdeen. I will be analysing whether there are any differences in participants' experiences and the meaning they give to them.

Are there any risks involved?

Some people feel uncomfortable sharing their personal experiences and issues with a researcher. Please be aware that you do not have to answer any questions or disclose any information if you don't wish to do so.

If any of the data collection process brings up issues you wish to discuss further, I will be able to refer you on to more expert sources of support such as pastoral tutors, university support services, or delegated officers for the whistle-blowing process.

Are there any benefits in my taking part?

Yes! You may find it cathartic to talk about your experiences, and interesting to reflect on this aspect of your medical school journey.

Your contribution will help us to better understand the impact of widening participation on the medical school education experience. This can help us to inform and improve recruitment and teaching practices for all students.

To acknowledge that participants may have to take time out of their working day to attend the interview, participants will be reimbursed for their time with a £20 Love2Shop voucher.

What data will be collected?

Background data will be collected on:

- Which year of study you are in
- Whether you completed the Gateway2Medicine programme
- Your ethnicity
- Gender identity
- Type of school attended
- Parent/guardian's occupation
- Whether you are the first in your family to attend university
- Whether you have/were previously:
    - lived in an area with a postcode which falls within the lowest 20 per cent of the Scottish Index of Multiple Deprivation (authenticated by the University)
    - Registered with the REACH program Scotland
    - Schooled in a language other than English before starting secondary school

The main data collected will be your answers to the interview questions, which will be audio-recorded.

Audio-recordings of the interviews will be deleted once they have been transcribed (written). The transcriptions and your background data will be kept confidential and handled securely. Electronic data will be kept on a password-protected sub-folder of my University of Southampton network in accordance with the Data Protection Act. Consent forms will be kept separately from your background data and the transcriptions so that you cannot be identified.

The recordings will not be held on any computers or servers at the University of Aberdeen, or be accessed by any researchers or other members of staff at the University of Aberdeen.

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these

people have a duty to keep your information, as a research participant, strictly confidential.

The researcher will do her best to maintain your confidentiality at all times. Anonymised versions of your interview transcript, or parts of the anonymised transcript, may be shared with my research supervisors to ensure quality in the analysis. One of the researchers, Sally Curtis, is a member of the faculty teaching staff. I (Heather Mozley) will not share complete transcripts with Sally, to minimise the possibility of anyone being identified. Being involved in this research will not impact your university progress.

Due to the research being conducted within a case study methodology, and the use of narrative methods, some identifying features of participants may be used to understand and interpret the data. It is therefore difficult to guarantee complete anonymity in the analysis and write-up of the research. However, I will use pseudonyms to disguise potentially identifying factors such as names and locations. I may contact you by email to discuss the process of anonymising your data during the research (until December 2021), although I will aim to keep this to a minimum. For example, this could include a potential identifying factors in the transcripts that I would like to paraphrase, to confirm that you are happy with the paraphrasing. You will need to agree to be contacted for this purpose in the consent form.

All data will be stored securely as described above.

If you have any questions at all about anonymity and confidentiality, please do get in touch.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

You can register your interest in participating by emailing me at h.mozley@soton.ac.uk

What happens if I change my mind?

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights being affected. We would ask to use all data collected up to the point of your withdrawal, which will be kept subject to confidentiality procedures. However, it will be possible for you to withdraw your permission for the use of interview data until the end of December 2021.

What will happen to the results of the research?

The results of the study will be written up and submitted in my PhD thesis. They may also be used as part of articles submitted to relevant journals for publication.

Your personal details will remain strictly confidential, pseudonyms will be used to disguise identifying factors such as your name. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent (I will contact you to clarify if appropriate).

Where can I get more information?

If there is anything that is unclear, or you would like more information, please feel free to contact me (contact details below).

Thank you for taking the time to read this information sheet.

Contact details:

Lead researcher

Heather Mozley

Postgraduate Researcher

Primary Care, Population Sciences and Medical Education

Faculty of Medicine

University of Southampton

Building 85

Highfield Campus

Southampton

SO17 1BJ

Email: H.Mozley@soton.ac.uk

Tel: 023 XXXX XXXX

Research supervisor

Prof Sally Curtis

Deputy Head of School Education

Primary Care, Population Sciences and Medical Education

University of Southampton

Building 85

Highfield Campus

Southampton

SO17 1BJ

Email: s.a.curtis@southampton.ac.uk

Tel: 023 XXXX XXXX

Research coordinator at University of Aberdeen

Professor Colin Lumsden

Lead of the MBChB University of Aberdeen Medical School

Institute for Education in Medical and Dental Sciences

School of Medicine, Medical Sciences & Nutrition

Foresterhill

University of Aberdeen

AB25 2ZD

Email: colin.lumsden@abdn.ac.uk

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk).

Ethical conduct

This study has received ethical approval by the University of Southampton ethics committee (ERGO 62521).

Conduct of the study at the University of Aberdeen has been approved locally by the Chair of the School of Medicine, Medical Sciences and Nutrition Ethics Review Board (SERB), Professor Helen Galley.

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 10 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Thank you.

Thank you for taking the time to read the information sheet and considering taking part in the research.

L.4 Consent Form (Aberdeen)

STUDENT CONSENT FORM

Study title: *Exploring the reciprocal benefits of widening participation in medical schools*

Researcher name: Heather Mozley, Postgraduate researcher in Medical Education

ERGO number: 62521.A3.R4

Please initial the boxes if you agree with the statement(s):

I have read and understood the information sheet (Sept 2021, v6) and have had the opportunity to ask questions about the study.

I agree to take part in this research project and agree for my data to be used for the purpose of this study.	
I understand my participation is voluntary and I may withdraw any time before November 2021, for any reason, without my participation rights being affected.	
I understand that taking part in the study involves audio recording which will be transcribed and then destroyed for the purposes set out in the participation information sheet. I understand that Microsoft Teams records video too, and that I may switch off my camera as only audio is needed for this research.	
I understand the limitations of anonymity in this study as set out in the Participant Information Sheet (Sept 2021, V6).	
I give permission for the researcher to contact me by phone and/or email during the period of the study (until January 2022).	

Name of participant (print name)…… …

Signature of participant……

Date……

L.5 Demographic data sheet

Demographic data collection sheet

Study title: *Exploring the reciprocal benefits of widening participation in medical schools*

Please complete the following demographic information on the following page to the best of your ability.

If you're not sure of an answer, please feel free to email me at h.mozley@soton.ac.uk or put 'not sure' in the box.

You can also put "prefer not to answer" if you wish.

Current year of study: (please put a cross next to the appropriate answer)	☐ **Year 3** ☐ **Year 4** ☐ **Year 5** ☐ **Other (please state):**
Have you previously completed the Gateway2Medicine programme?	☐ Yes, I completed Gateway2Medicine ☐ No, I did not complete the Gateway2Medicine programme
Gender	☐ Male: ☐ Female: ☐ Non-binary: ☐ Prefer not to say:
Ethnicity:	
What type of secondary school did you attend?*	
Parent/guardian occupation (if known, for both parents if appropriate):	
Did your parents/guardians attend university? (If yes, please provide details if known)	

Prior to attending university, were you primarily educated in English?	☐ **Yes** ☐ **No** ☐ **Not sure**
Prior to attending university, did you participate in a REACH programme?	☐ Yes ☐ No ☐ Not sure
Prior to attending university, did you ever: receive Free School Meals, an Educational Maintenance Award or experience 'severe' financial hardship?	☐ Yes ☐ No ☐ Not sure

*For example, a government-funded, non-selective school; a selective school such as a grammar or religious school; an independent or privately funded school. If unsure, please put the name of your school and the town/city and I can find out

L.6 Recruitment email and poster (Aberdeen)

Dear students

Please see the attached message from Heather Mozley, a PhD student at the University of Southampton medical school who is looking for medical students at the University of Aberdeen who have completed the G2M programme to take part in some research interviews:

I'm Heather Mozley, a PhD student at the University of Southampton medical school. I'm looking for former G2M students who are currently studying medicine at the University of Aberdeen to take part in some research interviews about perceptions of diversity in the University of Aberdeen medical school. Participants will receive a £20 Love2Shop voucher for taking part.

Please see the attached recruitment poster advertising the research. You are under no obligation to reply but it you are interested in participating or would like to find out more about the study please send me an email (h.mozley@soton.ac.uk).

If you would like to talk to someone at the University of Aberdeen about this research, please contact Professor Colin Lumsden (colin.lumsden@abdn.ac.uk).

With best wishes, Heather Mozley

Postgraduate researcher at the University of Southampton medical school.

Appendix M Narrative interview framework and prompts

Title: *Exploring the reciprocal benefits of widening participation in medical schools*

Interviewer: Heather Mozley

ERGO number: 62521

*Interviews to be conducted virtually using Microsoft Teams

Introduction

About me:

I am a PhD student in the Faculty of Medicine at the University of Southampton, researching the impact of widening participation in medical schools.

About the study:

The purpose of the study is to understand *how* having students from different backgrounds in medical schools can impact the undergraduate experience.

As a reminder, this is a narrative interview. What that means is that I'll ask you a couple of background questions to get us started. Then I'll ask you to tell me a story, and will try not to interrupt as you tell it – I want to hear what you have to say! I will put some prompts on a slide to help you – you don't need to use these if you don't want to.

After you've finished, we'll take a quick comfort break and I'll prepare some questions about bits of your story I'd like to know more about.

Overall, I think this will take up to an hour.

About the interview:

I will be recording the interview using Microsoft Teams. Please note that Microsoft Teams records video automatically, so if you do not wish to be recorded on video, please do feel free to turn off your camera. I will be transcribing the audio-recording only, and then the video or audio recording will be deleted.

I will also be taking notes in case there are any technical issues. Your answers will be confidential unless I am concerned that there's a risk of harm. A pseudonym will be used on your transcript and in any reporting of the data to protect your identity. Nothing you say in this interview will impact on your progress at university.

You do not have to answer or contribute to all of the questions so please do not feel obliged to do so.

Do you have any questions before we get started?

Participant (code): Time and date of interview:

Introductory questions:

Can you tell me a bit about your educational background? What was school like for you?

What made you decide to study medicine?

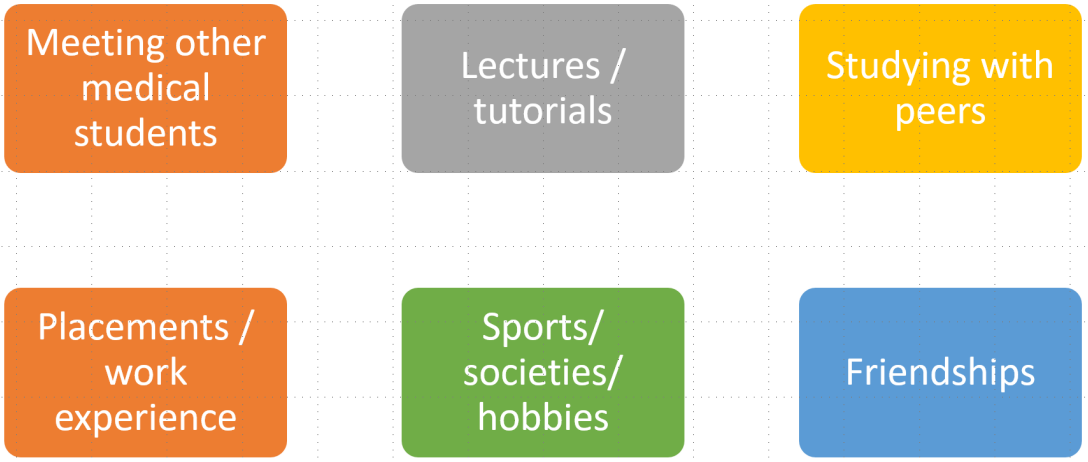
Main question:

During my focus groups at the University of Southampton and the University of Aberdeen, many students told me that integrating with students from different backgrounds in medical school has changed them in some way – for example by increasing their understanding of different patient populations, or changing the way they think about medicine or society, or by helping them to realise the unique contributions that they bring to the medical school.

1) "Tell me about a time(s) when you have interacted with a student from a different background to you, that had an impact on your medical education experiences. You can talk for as long as you like, I won't interrupt. There are some starting ideas on the screen, but you don't have to talk about all or any of these in our conversation"

Offer participant prompts (powerpoint slide on shared Teams screen):

Tell me about a time(s) when you have interacted with a student from a different background to you that had an impact on your medical education experiences.



Participant has a short break while the researcher develops PINs

Follow up question prompts:

General: How has studying at the University of Southampton *in particular* affected this experience?

When developing PINs, look out for aspects of the institutional context to explore, such as:

- How do they know if a student is from a different background?
- Do they know students who undertook the G2M programme?
- The single year duration / reputation of the G2M programme (e.g. if references made to G2M students in older years / graduates)
- General diversity of the cohort
- Contextual knowledge about WP / diversity in Scotland (e.g. returning to community of practice)
- Any WP criteria that are referenced in the initial narrative (e.g. rural / income / first in family)
- Individuals in the medical school
- The location of the medical school (e.g. diversity in Aberdeen, patient population)
- The reputation of the medical school
- Medical school attitudes, values, culture
- Experiences occurring in:
    - Particular timetabled classes
    - Extra curriculars at the UoA
    - Clinical placements – these begin earlier at UoA?

Open ended questions

- What else can you tell me about...?
- What did you think about...?
- How did you feel when...?
- How has that experience affected you as a medical student?
- How has that affected your clinical practice / the way you think about medicine?

Appendix N Example of narrative analysis through McCormack's lenses (Sade's story)

Quote

"doing placements with people who WEREN'T from London or came from somewhere else was actually quite interesting 'cause like people DO actually live elsewhere@, like not everyone lives in London, um, and kind of just finding out what life is like for different people"

"mostly in London, like you know- you know the people that are in London and everybody else is a tourist that you just like, @walk past them and be like, @keep it moving!"

Narrative processes	Missing some features expected of *Western* narratives: sense of other 'characters' as *people and generalisations:* **'impact' isn't attached to *particular* person, but perhaps interactions with multiple people** Little temporal organisation – 'actions' are in random order and surrounded by orientations and evaluations. Temporal confusion is compounded by use of indefinite you and present tense – the reflective/learning process happening now (in the interview) or is on-going/frequently happening rather than *something that happened.* **This could reflect that she's *working it out* still – hasn't organised her own ideas about impact of diversity. However – could also reflect my own position* (see Active Listening slide)** Few and brief examples of 'complicating *action*' – the 'action' are often verbs of being, receiving ("you get to like find out", "**get** a more rounded (.) um (.) perspective" – **learning from diversity happens *to* you (passive?), lack of acknowledgement of the need for reflection** (**links to idea that she's part of the privileged majority in medicine – people who do NOT 'fit in' more likely to reflect on difference and the impact of it**) Coda, what she has learned, summarises her development, from "*everybody else is a tourist... Keep it moving*!" → "*they're basically at your (.) same (.) level*" (see language slide) **Theorising:** huge list of questions – **working it out.** "*And being able to **like, I guess**, get a more rounded **(.) um (.)** perspective of people*": I guess, pauses, fillers = **lack of certainty** around her conclusions

Language	**Pronouns:** Use of indefinite you "when *you* meet different people" – suggests some hypotheticality, not something which HAS happened, which she HAS learned in a concrete way or a frequent experience which is shared by everyone - supported by phrases of assumed knowledge, "*you know*" (at least everyone she interacts with as she indicates a preference for people from London) **Verb use** implies that learning from difference happens organically, naturally, that there's *no choice* "you have to be like, "OK, yeah...", "it makes you a bit more UNDERSTANDING" rather than a *conscious process* of reflection. Complemented by passive verbs "*get* a more rounded perspective" – not from developing, reflecting, wondering, questioning – just receiving this insight. Contradicted by her list of questions which arise from these experiences **Repetition/frequent use** of the phrase "*different PLACES*" to describe anywhere outside London – as if London is a homogenous region rather than itself diverse. Suggests a lack of depth/superficiality – she is still working it out Use of **questions and auxiliary verbs** – what would that- um (.) your day to day look like? But few answers and no solid examples of 'impact' – She's still **working it out** **Metaphorical language for 'Othering':** "*everybody else is a tourist*" – foreign, different, transient (no impact on her) "*keep it moving*" – people outside London are slow, inferior, she has no interest in them. "*basically at your (.) same (.) level*" metaphor for equality in hierarchy – perception has shifted. Hesitance/uncertainty revealed through pauses and hedging (basically) here suggests she's ***developing this idea as she says it –*** not quite *transformed* yet, doesn't fully believe it. Similarly, "*you get a more rounded (.) um (.) perspective*
Context: Situational and cultural	**Personal context:** Very clear that P2 has a strong sense of London identity that she brings to this interview. Personal narrative – what makes her different **Interactional**: Quite a long, lengthy response to the initial question with quite a lot of repetition – repeating idea of London-centric, lots of rhetorical questions. Participant has a keen interest in this topic (first, long response). Questions – but not expecting me to answer. **Cultural:** Look into discourse of London Patriotism and the impact of it. Resisting the typical discourse of the impact of diversity (relating to culture/ethnicity) – she has grown up in London which is very diverse – and is *resistant to the idea that she can learn from OTHER forms of diversity* because she has been exposed to so much diversity within London

Moments?	"*coming to MEDICAL school and, like, doing placements with people who WEREN'T from London or came from somewhere else was actually quite interesting 'cause like people DO actually live elsewhere@, like not everyone lives in London, um, and kind of just finding out what life is like for different people*" Moment(s – 'people' implies multiple) of realisation, almost an epiphany – sense of shock, surprise. Emphasis on "*DO*", plus adverbs "*actually*" – 'actually' indicates that it is unusual, emphasising this as a moment, different to her normal/standard experience. Perhaps indicates that she thinks it's unusual to come across people from outside of London? Clear that in London she didn't talk to people from outside London (the 'tourists') The realisation, followed by string of questions represent a first point of change in **transformation** – prompted a series of questions, questions *challenging previous way of thinking* ***('a disorienting dilemma'. 'a critical assessment', 'exploration')*** **– working it out**

Appendix O Reflection on Sade

O.1 Reflection on personal contexts: ethnicity and story-telling

Although Sade's narrative exemplifies the focus group findings in many ways, it was extremely difficult to analyse. Her revelation at the end, about how difficult it was for her to transition to medical school because of her culture and ethnicity, made me question her somewhat ambiguous stories in the wider narrative about 'people from outside London'.

The powerful impact of previous life experiences on experiences of Southampton medical school were really highlighted to me during my conversation with Sade. Having grown up rurally, I was a bit confused by her frequent references to how different living in London was, and what made that so important, and I wanted to understand it better. One of my research colleagues in the medical education research group was also a Black medical student from London, and she generously agreed to read through Sade's (anonymised) transcript and share her insights, experiences and reflections. Her thoughts and feedback were an invaluable source of support in understanding the experiences that Sade shared with me, and made a significant contribution to my analysis and the interpretive story.

Examining Sade's transcript through the lens of language also caused me some confusion. What Sade said did not always align with 'how' she said it. There were gaps: Sade spoke very quickly, and, as I noted in my post-interview reflexive journal entry, there were many moments during our interview when I wanted clarity on something she had said. I began to interrupt with an unacknowledged "um", or was reluctant to disrupt her flow, leaving many questions unanswered as more arose. When I returned Sade's transcript and my summary of it, I asked for clarification about what she meant for a number of lines, but she couldn't remember. I was reluctant to impose my assumptions about what she meant in these quotes, and have tried to make explicit where I feel I have made interpretations.

Sade's narrative also lacked many features[206] which are common to narratives:

- Descriptions of other 'characters': although we get a good sense of who Sade is, there is only a generic sense of 'other' people
- Events, interactions or 'complicating actions': she mostly shared general observations
- Past tense: most of her narrative is in the present tense. Rather than recounting things that have happened, she told me things that "are"

She shared more internal processes and reflections than describing actual experiences; her narrative was often vague and ambiguous. I spent a long time reflecting on what this could mean: was it a reflection of my narrow perception of what a story should 'be' based on my life-long exposure to Western-style narratives[206]? Or did it show that Sade had few interactions with students from different backgrounds that she considered meaningful or impactful (hardly surprising given that nearly half of her medical school experience had been affected by Covid-19 restrictions)? Perhaps it suggested that learning about and from others comes from unidentifiable micro-

moments which are not significant moments embellished with context, but cumulatively build a general picture of how life can be different for someone else?

Another factor that may have impacted her storytelling and my interpretation is ethnicity, and difficulty or discomfort on both of our parts in delving deeply into this issue. There are a number of tentative hints in Sade's interview that race impacted her early interactions with students from different backgrounds, although she did not often say this explicitly. As I am White, she may have felt less comfortable talking to me about her experiences and feelings of being Black in a predominantly White environment. Equally, it may have impacted my questioning. There are a number of factors which affected my line of questioning during the interview (the novelty of interviewing 1:1 online, time constraints and my methodological commitment to minimise 'butting in'), but viewing the transcript much later, I questioned whether I probed less around this complicated and sensitive topic than I might have about another facet of diversity that I am more familiar with, such as schooling or socioeconomic status.

O.2 Minimising socioeconomic difference:

Sade was privately educated before progressing to medical school, and this seemed to be a source of some tension for her. Instead of describing her school experiences, she described the decision-making process that led her to private education, listing reasons for choosing a fee-paying school. She described her private school as both socioeconomically and ethnically "*multicultural"* and "*one of the cheaper ones*", explaining that most people at her school had "*normal*" working parents and many had received bursaries or scholarships.

Her story of her educational background was full of augmentations (aug) and argumentations (arg) which seemed to 'justify' the decision to go to private school.

Transcript segment	Narrative processes: structural coding	Narrative processes: functional coding
Heather: What was school like for you?		
Sade: Um, so, I've been to private school for most of it, to be honest.	AB	
I think 'cause we lived in like South London, my mom didn't really like @the public schools around the area.	EV	Aug
So after midway through reception actually, um,	O	
I moved to, um, a private school,	CA	
BUT it was always, like, very, like multicultural,	EV	
which isn't necessarily common amongst the private schools in the area, like, that I was in, just like, Northtown.	EV	Arg
Um, so, um, YEAH, it was one of the few @@ that was actually multicultural,	O	Desc
and I know that, like, my mom was saying that, like, some of the others, like, didn't accept me (2)	EV	Aug
So it was that one. And then I stayed there for- 'til Year 6, and then applied for grammar schools.	CA	
But again, I lived in central (.) London, so there's a lot of catchment areas for grammar schools which we never fall into, and, um @@ if you're not in the catchment area, then you have to score like I think in the top 60 of the thousands of children that applied	O	Arg
Heather: Wow!		
Sade: For them to consider you,	O	
and so, I didn't do that @@	CA	
So, then I ended up going to the one-	CA	
the ONLY actual private school that we applied to- for (.) sec- secondary School, um, which I did (.)	OR	Aug
probably one of the cheaper ones to be honest	EV	Aug/Arg
@um, but it was in it was in South- @it was in um, Southtown,	OR	
um, so not- it wasn't the closest, but it wasn't too far either.	OR	Aug

Her language was hesitant; full of fillers (um, like) and awkward laughter as she listed reasons for being privately educated. By citing her mom's rationales for going to private school, she circumvented any responsibility for the decision. "*To be honest*" connotes

that her attending private school is a fact she thinks I might not want to hear, or that she was reluctant to share with me.

She explained that her peers were "*mostly, like, people with working parents, like, nobody was (.) incredibly rich or @anything, so everyone was kind of- there wasn't really that (.) atmosphere of like snootiness and stuff that I know that people can COME out of prep schools with*". The 'situational context'[215] seemed to be important here: would her explanation of her school experiences be different to someone who was not a WP researcher? What if she was speaking to a consultant in hospital, or a medical student she perceived as being from a similar educational background?

Sade constructed herself as someone who was exposed to a diverse range of people and minimised the risk of being stereotyped as a 'snooty' private-school student. Although she briefly acknowledged the 'support' she had received in her application to medical school, she minimised the broader educational, social and cultural resources and opportunities which are required to access private education, and which it can, in turn, confer on students. Her aim was for me to understand that her school was culturally and (from her perspective), socioeconomically diverse; but having students from a range of socioeconomic backgrounds, for example, does not necessarily reflect the experiences of students across the socioeconomic spectrum.

Appendix P Maduka's passion for medicine

He became particularly animated as he described an inspirational work experience placement in a Urology ward, and his excitement about becoming a doctor:

> *The Consultant that I was with was just (1) It was just so charismatic, it was just so knowledgeable I- I just- I was- I just really, really loved, uh, the way he uses his knowledge and applied it to like help people? I- it was really, really, really, really- was just really fascinating to watch that people need to know a lot, you know (1.5) To actually treat people like, the- the amount of knowledge doctors need to have, I think (1) I really wanted to be in such a p- (1) privileged position. I just wanted to have that much knowledge and I think that was something that was really attractive*

The pace of his speech increased, and his language became colourful as he described his hunger for consuming the pools of knowledge, status and privilege he observed on his placement. His repetition of "really" revealed an almost childlike excitement and passion, and how inspired he was by the experience with this consultant. This marked a notable shift in our interview from one that was slightly uncomfortable and hesitant, for both of us, to a much more relaxed situation, punctuated by snippets of laughter and smiles:

Heather: @@ *Your passion is really coming through here* @@

Maduka: @@ *Yeah!*

The dramatic shift in his speech seemed to reflect a turning point in his life: he had found his purpose in life and focused on his passion for Biology: "*I was just CAPTIVATED by how much the body does*".

Appendix Q Rishi's carer role and interpreting Ayo reflection

Q.1 Rishi's carer role:

The flow of Rishi's speech changed dramatically when discussing this part of his life, signalling shifts in emotion. The following lines of transcript have been formatted to reflect the 'jaggedness' and 'smoothness' of this conversation to make the structure more explicit[103]. Linguistic features such as pauses, false-starts and fillers have been emboldened to highlight their unusual prevalence.

Heather: *What made you decide that you wanted to study medicine?*

Rishi: ***Um (1)*** *a lot of different factors actually,* ***um,***

but the main thing was, ***um (1****)*

Because, ***uh (1)***

Was mainly because of my mum.

Um, *she's****, um,***

*always had****, um,***

issues with her knees and then, ***um,***

*she's had couple of operations done to both her knees****, um,***

*to remove her****, um,***

parts of a meniscus that's just inflamed and she's always struggled with ***um, um****,*

walking and as a housewife, which is probably like one of the hardest jobs in the world, ***you know, you kind of- she- she, um,***

even to get ***like, um,***

her- she-

I know she's a very studious person because when she was getting, ***um,***

when she was trying to apply for, ***um,***

British citizenship, um, in the Adult Learning Center, to do this, ***um,***

English course, she was able to do it within half the time that most people were, ***um,***

doing, ***um,***

to get the citizenship. So, I knew she was very studious person. But I think, ***um,***

because of things like, ***um (.)***

cultural things and so on, ***she-*** *she just chose to become a housewife* ***for- um****,*

as ***a-*** *as a day job.*

So, all that potential is ***kind of, like (.)*** *not realized* [I: mmmm] ***um,***

and she's really, ***um (1)***

overly ***k-keen*** *as a homemaker,* ***she-***

everything has got to be (.) tiptop for her.

However, over the years, especially since 2000 and (1.5) 9, I'd say?

Like, her condition really deteriorated to extent where (.) some days she just wouldn't be able to walk like ***(.) um,***

she'd just, uh, wake up and we'd just give this look to each other and be like, 'OK, it's one of those days' and then you,

kind of,

like,

take over.

Um, so, and, you know*,*

just taking her to the hospital and speaking to the consultant sometimes and any health care professional, actually. Yeah, I kind of got the sense that every time she comes back (.) especially after her surgeries, she's so much better and like it's ***just-*** *it was, at the time, it was just amazing for me to think about, you know (.) these people are literally seeing patients like my mum (1)*

on like an hourly basis. And they're literally transforming their lives and (.) I kinda wanna do that!

The visual representation of this quote reveals the dramatic changes in the flow of speech at different moments during the story. As might be expected for a trainee doctor, Rishi presented factual information about his mother's medical condition (the inflamed meniscus, the date her condition deteriorated). Yet these facts belie an emotional undercurrent; this part of the story was delivered in a somewhat awkward manner, punctuated by pauses, ums and false starts. This part of the conversation was a struggle. A subtle switch from first person pronouns ("I"), which Rishi deploys throughout most of his narrative, to the generic second person ("and then you, kind of, like, take over") created distance when describing this difficult and emotional moment[228]. Towards the end of the story, Rishi's passion for medicine shone through; his words flowed easily and his language became more emotive as he described his experience of medical professionals as "amazing" and their jobs as "transforming" lives.

Q.2 Reflections on 'Ayo': what is difference?

In my post-interview notes, I described some initial confusion about why Rishi was telling me a story about this student, when I had asked for a story about students from *different* backgrounds: most participants described broad differences between themselves and the students in their stories, whereas Rishi highlighted similarities he shared with them.

His description of her included several specific details:

- Where she was from and her reasons for immigrating to the UK
- Many hardships and personal challenges she experienced

- Her caring responsibilities
- Her former employment
- Her route into medicine
- Her average scores in medical exams

I wrote:

He seems to have a lot in common with Ayo:

- *both immigrants who took unusual detours to medicine and entered as mature students.*
- *both work part-time to support themselves*
- *clearly share strong values about the importance of education.*

Presumably this gives them plenty in common compared to students from more 'traditional' medical backgrounds? It's interesting that he's chosen to talk about her as an example of a student from a different background? Is this a misinterpretation of the question? Or does it say something about the story he's trying to tell?

This initial reflection provided a useful guide for my interpretation. It helped me to recognise the influence of my own assumptions and expectations about what 'similarity' is and what 'difference' should entail; to move away from them and towards an understanding of difference in relation to the student's own background and what they chose to reveal within the situational context of our interview. A key perception of 'difference' for Rishi related to Ayo's worldview; her confident perspective on education and the purpose of being at medical school. She was different to him because she had **more** commitments, and because he perceived her as academically exceptional.

Appendix R Summary of Mairi's story about an Unexpected Friendship: "we don't always know what's going on with our peers' home lives (.) or what support they have"

Mairi's response to my main interview question (about the impact of WP and diversity on her experiences of medical school) was a 6-and-a-half-minutes dialogue, punctuated only twice by brief verbal acknowledgements from me. This was an important and impactful experience. She later asked me to remove some of the details of the story which exemplify the relevance to WP and diversity to protect the anonymity of herself and her friend. However, her story is important, and Mairi's ability to critically reflect and generate broader insights which she could practically apply in her personal and professional experiences of medicine are inspiring. I decided to include a reduced version of the story.

She shared with me her story about a growing friendship with a student, Jane, who had lost a close friend to suicide, as they worked on a long-term team project. Mairi described how she and her team tried to help Jane, who was still "*coming [to classes] and all that- I have no clue how she was able to kind of get- because that was one of her best friends (1*)". Mairi realised that Jane had inadequate personal support but was reluctant to ask for help or for time off from the course for fear of looking too weak to cope with the rigour of medicine.

She added a side story, an argumentation[215], about a student she knew who had developed a phobia of blood, "*um, which is not the most @useful when you're in Medicine @*". The student had been too afraid of being removed from the course to seek help at first, which ultimately resulted in her needing to take three years away from the course. However, the student returned to medicine and had recently graduated. Mairi began to recognise an institutional expectation that "*you just have to kind of (.) get on with it (1) um, and just be, as you know, like resilient etc, and just bounce back from these different things*". Mairi became more aware of a dangerous institutional discourse of fear created by "*the looming thing of, you know: GMC Fitness to practice!"*

This was a significant 'moment'[215], or epiphany[220] for Mairi, which revealed to her how harmful the culture of medicine could be. Her shock and the intensity of realisation are encapsulated by her frequent repetition of "*actually*":

*“sometimes we don't **actually** realize (1) how personal these things can be”*

*“**actually** (1.5) Taking time out isn't a weakness, and it's not (2) A bad thing at all,”*

*“and **actually** it's a strength, admitting you need help”*

*“seeing other people and **actually** knowing that these things are OK”*

*“it is **actually** checking: are people okay?*

*“you could **actually** be missing something that's more important.*

***“actually** there might be something a bit more (1) Underneath that, kind of, going on?*

*“but **actually** he, um, wasn't (.) obviously fine”*
*“but check **actually** people are okay”*

***“actually** it's more important to look out for each other”*

*“the importance of **actually** people being OK”*

“*Actually*” can signify an awareness that the position taken is unusual or different to the norm[103]; the position of “*keep going*” is part of a wider cultural norm that Mairi was beginning to resist. Mairi used this adverb 13 times in her 6.5 minute story in multiple ways, which each powerfully conveyed her frustration, her surprise, her dissent and disagreement, her desire for meaningful change in the support and care that medical students are offered. Ultimately, Jane took a break from medicine to process and heal, and this led Mairi to challenge what she perceived as a deeply engrained discourse in medical school that help-seeking and self-care is ‘risky’: “*Taking time out isn't a weakness, and it's not (2) A bad thing at all, and actually it's a strength, admitting you need help*”.

This also burst a bubble for Mairi, a taken for granted assumption that most people, like her, had a close support network: “*I'm quite lucky that all my group of friends are all very supportive of each other*”. In contrast, neither Jane nor Jane’s friend had close family or support. She had reflected on this privately, and expressed a realisation:

we don’t always know what’s going on with our peers’ home lives (.) or what support they have (.) or what other like, things they have to do in their lives that might mean (1) um, maybe they don’t always have the time or resources that other people have to deal with personal issues (1) and um, how that can (1) build up.

Mairi added a second argumentation about a recent spike in suicide among Junior Doctors to strengthen her argument and highlight that lack of accessible support was a wider institutional rather than individual concern or one-off incident. Once again, Mairi's recognition of inequalities among her peer (in this case, inequality of support) led her to take an individual role to address gaps in institutional provision. She described how she had increasingly been "*checking: are people okay? On a regular basis and not just (1) superficially checking if they are okay (1)".*

Moreover, she applied this insight to her professional role, recognising the risk of only superficially checking in on patients' well-being or not enquiring about their access to support:

> *Doing patient history in five minutes and it's like, well, just ask the relevant things, but you could actually be missing something that's more important. Like yes, they could be coming with like abdominal symptoms, but actually there might be something a bit more (1) Underneath that, kind of, going on? Um, because I know (1) um, the person who committed suicide, he seemed FINE from what everyone was gathering, etc. UM (.) but actually begun wasn't (.) obviously FINE, and his friend who I worked with, she seemed fine but getting to know that she HAD so much on and she WAS struggling*

Mairi's story is an extreme illustration of the potential for interactions between students from different backgrounds to trigger a powerful recognition that people are complex, and much more than what they simply appear to be on the surface. Mairi indicated her intentions to put this knowledge into practice, giving the example of taking a patient history. Longitudinal data could help to examine whether students, like Mairi, actually enact this insight in their interactions with patients, or whether competing priorities or structural barriers (like short consultation times) inhibit the realisation of this learning into potentially life-saving practices.

Appendix S Tariq's other stories

S.1 The influenced of 'privileged' students communication skills

Tariq spoke frankly about aspects of his background and upbringing that he perceived to disadvantage him within the current model of medical education:

> *These are things which - coming from my background – as the world is today - will not be enough to get me in that field.*

He provided two examples: firstly, the writing skills required in research, and secondly, adapting his spoken language to communicate effectively with patients. Although he recognised that writing to the high standard required within the field of research was challenging for all students, he felt that superior communication had "*just naturally been part of their bring- UPBRINGING*" for privately educated students. He contrasted this within the context of his own school experience, in which a teacher had explicitly told him that

> *"*People from lower socio-economic, we're not taught how to do public speaking very well, and he said (.) that stems from like, a really like, outdated idea *[of education]* where you- they (1) expect (1) us, to go into a job where that doesn't matter."

By observing other students communicating with doctors on placements and delivering presentations in the classroom, he identified how he could communicate more effectively and thus become a better doctor.

> *The way certain people speak, when I see that they're speaking quite proper. I think, 'OK, that's a really good way'. It doesn't need to be POSH, and that's not my point here. I don't put on a posh- I like- just like, being professional and (.) well-spoken, CLEAR, and I think these are skills that are really well developed, in like, privately educated schools*
>
> *I'm like 'OK, this is the level that I need to be at. So, this is where I need to improve', and I'm only going to be able to do that by looking at these other people and saying, 'OK, I need to improve myself.' 'Cause if I think I'm good enough then (2) I'm already losing. Does that make sense?* [**H:** Yeah, absolutely! Research, it's- it can feel like a whole new language!] *so yeah. So, these are things that I've seen like other people, and it's inspired me, it's motivated me to be better, if that makes sense, in terms of English writing, whether that's presentation skills or whatever. So yeah, so definitely. It's seeing these kinds of things during Med school, particularly from individuals who come from private schools, um, who come from more affluent backgrounds. Without them, I wouldn't have like, a level to work up to and improve myself.*

This provides evidence of Tariq's personal development and his resistant capital[96]: his recognition of educational inequity and his drive to challenge it to succeed in medical school as his authentic self. From his initial, informal 'Northern' slang ("*speaking quite proper*") – which mentally cast me right back home to my own Northern hometown - he quickly provided an augmentation[215] to clarify his meaning, making an intriguing distinction between "posh" and "clear". He later added that "*you can speak poshly, and you're talking absolute nonsense to a patient with big clever words".*

This echoes Southgate's findings; participants described developing a more "structured" way of talking in medical school, while expressing pride in being able to relate to patients from working-class backgrounds and a desire to avoid being seen as socially superior through the way they spoke[62]. Like many of Southgate's participants, Tariq also framed his narrative of becoming socially mobile as a positive, upward trajectory; language like "*inspired*" and "*motivated*" conveyed his passion and enthusiasm for personal growth, building a picture of his journey to become a doctor.

In concordance with the UoS focus group findings, Tariq drew on the metaphorical idea of "levels" to signify a hierarchy of medical students, a sense that there is a ladder to climb. For Tariq, observing and learning from students from other backgrounds acted as the rungs upon which he elevated himself. Later in the interview, he referred to the importance of 'social mobility' as a key driver of WP and of his own measure of success in medicine. He used other metaphors to convey his engagement with the challenges of self-development, the idea that if he assumed he was 'good enough', he would be "*already losing*": the battle? The game? Either way, he saw his perceived weaknesses as challenges to master rather than as threats to avoid.

This extract also reveals Tariq's ability to take initiative and the strategies he employed to support his skill development. He did not simply observe differences between himself and other students and passively absorb insights and skills. No one told him he needed to improve. His story shows how he capitalised on his interactions with other students by identifying areas for personal growth to enhance his performance. He demonstrated the use of a range of strategies:

- Engaging in self-talk, used to motivate and evaluate
- Framing his perceived weaknesses as areas for growth
- Describing his selection of role models, observing how they performed and considering why they performed differently to him
- Asking me, "does that make sense?", creating an opportunity for feedback to improve his communication

Throughout the interview, he asked me whether what he said "makes sense" on 14 occasions, communicating his desire to speak clearly and effectively. Within the context of our interview, outside of the clinic, he was practising the skill. The way Tariq framed his academic experiences and desire for personal growth from his university experiences echo those of Mandla, the Engineering student presented by Marshall and Case[103]. Like Mandla, Tariq acknowledged several challenges experienced during his medical education, but always highlighted the positives and opportunities these presented.

Another striking feature of this extract is that Tariq hinted at an awareness of the deficit discourse, and a drive to challenge it. He communicated that some of the 'challenges' he faced because of his background, his 'inferior' communication skills compared to some of his peers from more educated backgrounds, reflected the world (the culture of medicine) as it is today, rather than being an inherent problem. Nonetheless, he accepted that to succeed within the current model of medicine, the onus was on him to improve his skills; he needed to work harder on this skill than students from more affluent, privately educated backgrounds.

S.2 A future in the profession

Other cultural insights Tariq sought and valued came from students with doctors in their family. He benefited from working on group projects with one student, whose mother was a doctor and helped explain a complex topic to them. This represented an epiphany for Tariq in that that he hadn't previously considered how working in the profession would impact his personal life; he identified strongly as a legitimate medical student, but hadn't imagined his future as a doctor beyond the clinic. Although this does represent multiple 'moments' rather than a single interaction, Tariq did not imply that he formed a meaningful friendship with the 'other' student. Rather, this story illustrates the impact of cumulative moments which can be pieced together to develop new understandings of others' worlds.

We had like, an assessment to do, an assignment (1) And (1.5) Well, I was like- I was like, 'wow, this is really difficult.' (It was to do with anaesthetics.) 'I have no idea. Do you have any clue?' like to this girl who is in my group (1) And she was like, 'Yeah, yeah, I found it difficult too, but my mum's an anaesthetist'! (1) So, I was like, 'OK, that's cool', she like- and she- they helped me and I- I can't explain it to you, that (.) that kind of- it was WEIRD for me. 'cause at the same time that I can't relate obviously to that [**H**: no!] *'cause my parents don't come from higher education so it wouldn't occur to me that you could like (.) ask them for help. But the same time it was nice to know like she that she had someone who she could get help with, a contact. Um, and hopefully then for me, I'LL be in that same situation one day. Does that make sense? I mean maybe (1) there are things I could help her with from MY background. But mostly (1.5) maybe I'll be in a situation (1) Where I can then help (.) somebody who comes from a similar background to me. And I think that's what it's about. It's that PROGRESSION within society innit? (1) Because (.) that's what the aim is here, isn't it? You don't want to stay in the lower socioeconomic background your whole life. You want to (.) try to ELEVATE yourself so that you can help them, people within your community. So yeah, it's given me a sense of who I could be*

This is the only instance in Tariq's interview which includes dialogue (aside from 'self-talk'), revealing how significant and memorable this 'moment' was for him. While recalling the interaction, his speech was smooth and flowed easily. As he progressed to describe the impact, he began to pause more and his pace slowed, creating space for reflection and imagination. He asked rhetorical questions as he developed his own understanding of what this interaction meant to him, what it revealed. Again, as he considered the possibility of himself having a positive impact on medicine, his language became more cautious and hopeful, "*maybe*", "*I could*". His use of "*you*" when referring to himself created distance, suggesting that he was still developing his sense of "*who he could be*" in the future and reinforcing his sense of uncertainty. Tariq's consideration of the impact of his interaction with this student went beyond the immediate impact on him to how he could impact his community in the future, a relatively common goal among SURGs[59,62,63]. His patient-focused motivation for medicine, to become a doctor to serve his home community, perhaps explain his surprise at being confronted by the reality of doctors having a *personal* life.

FiF students often express concern that they feel underprepared to navigate the world of medicine compared to their peers[63], and have less clear understanding of future pathways within the profession[57,64]. Participants in Brosnan et al.'s study framed themselves as 'lacking' valuable insights and information to guide them through the journey, and perceived this to create a barrier to fitting in and befriending other students[63]. The way that Tariq framed this difference and disadvantage as an opportunity is unusual, but typical of his narrative. He created a form of social capital that gave him access to the resources he was missing[96]. Again, it is unclear whether this reflects that Tariq was at a later stage of study and more able to critically reflect on

previous experiences, or whether it is a result of personal differences or the support he received on the BM6 programme.